

A WEEKLY JOURNAL  
OF PHARMACY  
— AND —  
THE DRUG-TRADE.



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## NEW WORLD ISSUE.

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## PRICE-LISTS AND CIRCULARS.

ADVERTISING firms will please note that the next opportunity for sending out a Price List or Circular to the trade through the medium of THE CHEMIST AND DRUGGIST will be on July 25, when the

### Summer Issue

will be published. We would impress on advertisers the desirability of preparing an effective inset for this issue, of which 12,000 copies will be circulated. The charges and other particulars may be obtained from the Publisher, 42 Cannon Street, London, E.C.

## NEW "C & D." BOOKS.

BESIDES the new edition of "The Art of Dispensing," the following will be published soon, and orders for them may be sent to our offices, 42 Cannon Street, London, E.C., and to any of the wholesale houses :

"THE CHEMIST-OPTICIAN," a new work dealing with sight-testing and spectacle-fitting, fully illustrated. Price 4s. net, by post 4s. 3d.

"PHARMACEUTICAL FORMULAS," new and enlarged edition (seventh), which will extend to over 1,000 pages. No advance in price, which is 10s. net, by post 10s. 6d.

"VETERINARY COUNTER-PRACTICE," new and enlarged edition (fifth). Price 4s. net, by post 4s. 3d.

Orders for single copies, accompanied by remittances, will be booked for early delivery.

## Summary.

THE BILE-BEANS LITIGATION in Edinburgh has proceeded a step further (p. 799).

MR. J. HARCOTTE CUFF is the new member of the Pharmaceutical Council (p. 781).

THE BUSINESS HINTS printed this week include several schemes of window-decoration (p. 809).

THE APPLICATION of Schiff's reagent to the detection of formaldehyde in milk is described on p. 814.

THERE IS NO NITRATE in ung. hydrarg. nit. This is the substance of a communication by Mr. R. Cowley on p. 806.

SYNTHETIC SUPRARENIN is as active as the natural product, say Messrs. Meister, Lucius & Brünig in a letter on p. 814.

THE EXCISE DEPARTMENT of Inland Revenue is to be transferred to the Customs. What this means is told on p. 789.

"CANINE AND FELINE SPECIALIST" is the latest title which the Royal College of Veterinary Surgeons has succeeded in reserving for registered vets. (p. 799).

MECHANICAL WINDOW-DISPLAYS are one of the best attractions which retail druggists can instal. A few original ideas by Mr. E. Dangerfield are figured and described on p. 808.

THE PHARMACEUTICAL SOCIETY OF GREAT BRITAIN held its sixty-seventh annual meeting this week and dined the night before. We report the functions fully, beginning on p. 777.

A FEW NOTES in regard to the Franco-British Exhibition now open in London are given on p. 804. It promises to be a worthy rival of the greater International Exhibitions of the world held within recent years.

MR. NEIL C. POLSON, a well-known Canadian pharmacist and wholesale druggist, has given us his impressions of British pharmacy, as gathered during a recent visit, especially as applying to the future of the retailer (p. 808).

THE EIGHTH EDITION of "The Art of Dispensing" is published at the offices of the C. & D. this week. Mr. Harold Wyatt, in reviewing it says "it outstrips its predecessors in diversity of contents; it is thoroughly up to date" (p. 807).

JUSTICES DARLING AND PHILLIMORE, sitting in the King's Bench Division of the High Court, have allowed Messrs. Geraut & Co. their appeals against the decision of Judge Edge limiting a running account of syphons to six years (p. 798).

THE PURITY OF PHARMACEUTICAL CHEMICALS is the subject of a communication by Mr. Chas. Alex. Hill, B.Sc., which records results of the examination of commercial chemicals, and suggests standards of purity. The numerous considerations which are involved in this subject are thoroughly discussed by the author (p. 792), and further reference is made to it in comments on p. 790.

THE MARKETS have a somewhat better tone this week, while the numerous changes indicate an easy feeling among many products. Cocaine, shellac, bergamot oil, ipecacuanha, and balsam canadensis are higher. Opium, strychnine, potash prussiate, ammonia sulphate, benzols, palm and castor oils, orange oil, soda tart., pulv. seidlitz, and acetylo-salicylic acid have moved in buyers' favour (p. 810).

THE POISONS AND PHARMACY BILL has advanced a stage. The Joint Committee reported to both Houses of Parliament on Wednesday, recommending the introduction of Lord Ebury's clause, and the extension of the Bill to Ireland (p. 786). A special fund to mend or end the Bill was proposed by Mr. W. Glyn-Jones at the Pharmaceutical Society's annual meeting, and the latest particulars about this are given on p. 785.

## Corner for Students.

CONDUCTED BY LEONARD DOBBIN, PH.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

All communications and reports must bear the names and addresses of the writers, not necessarily for publication. The reports of those who ignore this rule are liable not to be dealt with.

### QUALITATIVE ANALYSIS FOR JUNIOR STUDENTS.

A MIXTURE of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopœia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Tuesday, May 26, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, June 6. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In the list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

SPECIAL NOTICE.—The prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, *which fact must be attested on their reports*. Others may obtain specimens of the mixture of salts, and their reports will be separately adjudicated, but they will be regarded as *hors concours*. Correspondents who do not state that they are preparing for a qualifying examination will be included in the latter list.

## Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.) will be esteemed.

200/23. Address of makers of Slater's Atonitis.

201/65. Makers of soap babies about 6 inches long.

200/59. Publisher of Beaumann's "Volumetric Analysis."

203/27. Who are the makers or agents for Dr. Jahn's liver pills?

202/62. Who are the agents or manufacturers of Cromotussin, Alexandra inhalers, and matto chains?

198/50. Makers or agents for dentifrice bottle with metal screw-cap with telescopic outlet for the powder in the centre.

201/66. What are freezing tablets, or where can they be obtained? They are used in an airtight chamber for producing cold for preserving food.

CULTIVATION OF HYDRASTIS.—Contrary to the usual opinion, Professor J. U. Lloyd ("Pharm. Rev.," May 1906) says that hydrastis is easily cultivated. If kept free from grass and in rich loam it increases rapidly by runners. He sees no reason why hydrastis should not yield profitable crops after the few years necessary for its establishment. We dealt fully with the cultivation and production of hydrastis in our issue of January 28, 1905.

## English News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

### Brevities.

Eight firms of chemists at Reading announce their intention of closing their places of business at 1 p.m. each Wednesday on and after May 20.

The premises of Messrs. Matthews & Sons, High Road, Leytonstone, were entered by burglars last week. About 5s. in coppers and a few stamps were stolen.

A fire occurred on May 11 at the premises of Taylor's Drug-stores, Ltd., in Hope Street, Crook, and in spite of the efforts of the firemen the interior of the shop and some of the stock was considerably damaged.

Two cases of vitriol-throwing have occurred during the past week. A woman threw a cupful of vitriol in the face of the matron of Reading Prison, and a Hull woman threw the same corrosive over two women and a little girl.

A fire occurred on May 13 in the chemical laboratory of P. B. Henwood & Co., Ltd., Market Street, Barnsley caused by the ignition of some methylated spirit. The outbreak was subdued, however, before much damage was done.

Bertram Mortimer, *alias* Professor Sylvester, a "medical specialist" with a wonderful "gold-dust cure," was sentenced to fifteen months' imprisonment at Clerkenwell Sessions, on May 15, for stealing a travelling-bag from Victoria Station.

Mr. John Painter, chemist, Gorse Hill, Swindon, was sued last week at the Swindon County Court by Mr. A. C. Hitchings, for 2l., goods supplied. Defendant declared that the account had been settled in full, and after going through the books judgment was given for 5s.

Mr. Richard Winfrey, M.P., gave evidence in the High Court on May 15 in an action for libel brought by a solicitor against a paper published by the Peterborough Advertiser Co., Ltd., of which Mr. Winfrey is managing director. The jury found for the plaintiff, and gave 200l. damages.

At the adjourned inquest at Hammersmith on the body of an illegitimate child, at which, on a previous hearing suggestions had been made against Ernest Bolton, an assistant at Boots, Ltd., King Street, Hammersmith (C. & D., May 9, p. 698), the girl who purchased the salts was present, and corroborated the evidence given by Mr. Bolton. She denied that she suggested that the medicine was required for a certain purpose.

### Sleeping-sickness.

The Government have decided to establish in London a Bureau for the collection and distribution of information with regard to sleeping-sickness. The Royal Society will find accommodation for the Bureau at Burlington House, and one-fourth of the upkeep will be borne by the Sudan Government. The Bureau will be under the control of an honorary committee of management. The committee will be composed as follows: Chairman, the Right Hon. Sir J. West Ridgway, G.C.B., G.C.M.G., K.C.S.I.; Sir Patrick Manson, M.D., K.C.M.G., F.R.S., Sir Robert Boyce, F.R.S., Dr. Rose Bradford, F.R.S., Col. D. Bruce, C.B., F.R.S., Mr. E. A. Walroné Clarke, Mr. H. J. Read, C.M.G., and (as Secretary) Mr. R. Popham Lobb. The duties of Director of the Bureau will for the present be undertaken by Dr. A. G. Bagshawe, of the Uganda Medical Staff.

### Dentists and Unqualified Practice.

A meeting of registered dentists was held at the Holborn Restaurant on May 13 with a view of considering what action could be taken to mitigate the evils of unqualified practice. Mr. H. B. Gill, L.D.S., of Harley Street, occupied the chair; Mr. J. T. Hoare, of Holloway Road, N., acted as Hon. Secretary *pro tem*. There was a very fair attendance, including several chemists who were also registered dentists. A resolution was proposed that a Defence Association be formed to check the spread of unqualified competition, and an amendment was made that the proposed Association be a branch of the British Dental Association. Mr. Alfred Higgs, J.P. (Kingston), in opposing the amendment, elicited from the Chairman that



members of the British Dental Association were debarred from advertising. Mr. Higgs said that this would prevent many dentists, especially those practising dentistry in conjunction with pharmacy, from becoming members, as advertising in some shape or form to a chemist-dentist could not be avoided. Mr. J. C. Pentney, of Dalston, said the best way was to obtain a fresh Act of Parliament prohibiting anyone, qualified or unqualified, from advertising dentistry in any way. The amendment was lost, and the original resolution was carried. A provisional committee, which included Mr. Alfred Higgs, was elected.

#### Drugs in the City.

The annual report of Dr. Wm. Collingridge, medical officer of health for the City of London, again gives prominence to the question of drug-adulteration. In the following table he shows the adulteration [of samples taken] in the City for the last seven years :

Year.	Samples taken	Percentage of adulteration
1901 ... ..	111	7.2
1902 ... ..	79	6.3
1903 ... ..	65	7.7
1904 ... ..	52	7.7
1905 ... ..	61	8.2
1906 ... ..	47	10.6
1907 ... ..	65	9.2
Metropolis (1906) ... ..	—	5.0

Having recalled that he had on previous occasions to point out that the proportion of drugs found to be not up to the standard requirements was far too high, Dr. Collingridge observes that little improvement in this respect took place last year. No fraud is intended on the part of the vendors, but there is carelessness or neglect to ensure that the drugs sold are in accordance with the recognised standard. After enumerating the adulterations and convictions for drugs he goes on to speak of prescriptions, stating that analysis showed that in twenty-five cases of simple prescriptions handed over the counter, no fewer than thirteen, or 52 per cent., of them were found to be inaccurately dispensed, because the capacity of the bottle had not been checked. Dr. Collingridge then mentions the special label now used by some City firms, suggesting that "requirements of Pharmacopœia Britannica" should be substituted for the words "new requirements of the Board of Health Department of the City of London." Reference is then made to the proceedings taken against several chemists for not making up prescriptions in accordance with the formula asked for, and in regard to the criticisms of the pharmaceutical Press Dr. Collingridge says :

Although the Pharmaceutical Society has not had occasion to exercise the powers which it has, it must be borne in mind that such powers have not lapsed, and that if in consequence of habitual carelessness on the part of compounders the Council is called upon to exercise powers conferred upon them by Section 26 of the Pharmacy Act, it will be seen that the consequences may be of much gravity to the offender. The Act provides that the Privy Council may direct the name of any person who is convicted of any offence under the Act, which in their opinion renders him unfit to be on the register under the Act, to be erased from the register.

The question of the B.P. as a legal standard under the Sale of Food and Drugs Acts is finally dealt with, the decision in the Dickens v. Randerson case being quoted in detail.

#### Drugs in Bournemouth.

Mr. R. A. Cripps, F.I.C., public analyst to the County Borough of Bournemouth, in his report for 1907 states that he examined 300 "official" samples and 100 "unofficial," the percentage adulterated in the former being 8; and in the unofficial 12, while 14 and 9 per cent. were poor or doubtful. The only drugs examined were citrate and iodide of potassium, and all (eleven) were genuine, although most of them contained traces of lead and arsenic, but none approached the limits of impurity (0.002 and 0.00014 per cent.) suggested by the Local Government Board. Besides these salts Mr. Cripps ex-

amined thirty-four unofficial samples of drugs, and he remarks of the whole forty-five that

Four samples were found to be adulterated or seriously deficient in strength, and it is interesting to note that of nine samples procured from unqualified dealers two were heavily adulterated, while of thirty-six samples from qualified chemists only one was adulterated and one seriously deficient in strength, this latter being lime water, which is notoriously liable to deterioration unless stored with great care.

The report as a whole is an exceptionally interesting one, but we refer only to the matters which directly affect the drug-trade.

#### Genuine Drugs at Woolwich.

The Local Government Board recently wrote to the Woolwich Borough Council drawing attention to the fact that except as regards dairy produce the provisions of the Sale of Food and Drugs Acts scarcely seemed to be carried out in the borough. The medical officer of health, to whom the letter was referred, reported to the Council that it had been found that, except as regards dairy produce, adulteration was almost non-existent. In the past five years there had not been a single prosecution in the borough for selling adulterated drugs. In only one case was a drug sample found unsatisfactory on analysis. The sample in question was camphorated oil, which was 2.8 per cent. deficient in camphor.

#### Analysts' Affairs.

In West Suffolk last year the only drug found adulterated was seidlitz powder, which contained  $7\frac{1}{2}$  grains excess of tartaric acid.

The public analyst of Bethnal Green reports that three samples of camphorated oil were analysed during the quarter, and two were found to be adulterated. One was  $11\frac{1}{2}$  per cent. deficient in camphor, while the other was made with paraffin oil and contained only one-quarter the proper proportion of camphor.

#### Contracts.

Winchester Board of Guardians.—Mr. F. J. Barratt to be chemist to the workhouse for the ensuing year.

The St. Columb (Cornwall) Board of Guardians have decided not to adopt the suggestion of the Local Government Board that the Guardians should provide expensive drugs and medicines instead of the medical officers doing so out of their salaries.

The vexed question of contracting for drugs with local traders was again raised, this time before the Knaresborough Board of Guardians, on May 13. Protests were received from the Knaresborough Traders' Association and from the Harrogate Tradesmen's Association against placing the contract with a Bolton firm. Both Associations asked the Board to consider the principle involved with a view to avoiding any recurrence of "such an injustice to local tradesmen and ratepayers." The Clerk said the Board had no right to confine themselves to local tradesmen and to ignore the lowest tender, and the Board proceeded with the next business.

#### Cricket.

May & Baker, at Raynes Park, overcame Davy Hill & Co. by 66 to 59.

Heron C.C. v. Baiss Bros. C.C.—This League match was played at Dulwich on May 16, and ended in an easy win for Heron by 83 runs. Scores : Heron, 115; Baiss Bros., 32.

Stevenson & Howell C.C., at Clapham, on May 16, lost to the Brixton Prison Officials by the narrow margin of 9 runs, the scores being : Stevenson & Howell, 39; Brixton Prison Officials, 48.

The Nottingham Chemists' Athletic Club have so far this season fallen victims to the weather. Their two first matches had to be abandoned because the heavy rains had swollen the Trent to such an extent that their ground was flooded. On May 14, in the match with Notts Unity, they succeeded in dismissing their opponents for twenty-six runs, but the eternal rain snatched victory from their grasp.

Wholesale Chemists' and Druggists' Cricket League.—A League match between Potter & Clarke's C.C. and Burgoyne, Burbidges' C.C. was played on May 16, Burgoyne's winning easily by seventy-eight runs. Scores : Burgoyne, Burbidges' C.C., 123 for six wickets (Nash thirty-two,

Martin twenty-five, and Dealtry nineteen). Potter & Clarke's forty-five. For the winners Dealtry took six wickets for twenty-five runs and Martin four for nineteen.

#### Birmingham Notes.

Yet another old chemist's business has gone—that of Mr. Pegg, corner of St. Luke's Road and Pershore Road, which is now devoted to hardware.

Boots, Ltd., have secured premises in High Street, Erdington, near Birmingham, and a notice says that the premises will be opened as soon as the necessary alterations are made. Erdington is about five miles from Birmingham, and is really suburban Birmingham, but a pushing little place, inhabited largely by those who have business in Birmingham, with which it is connected both by rail and tramway.

A curious experience of a local chemist and university graduate out of work is recorded. He called upon a Black-Country brewer and asked if he had a vacancy for a chemist. "Did anybody see you come in?" said he. "Not that I am aware of." "Then no one shall see you go out, for if it was known that I had even interviewed a chemist I should lose all my beer-drinking customers." And he let him out at the back door!

In the Birmingham County Court last week a curious claim was made against a local firm of oil-dealers. When passing their shop-door a woman slipped on the footpath and injured herself. She said this was due to petroleum on the path, and claimed 50*l.* damages from the firm; but the jury found for the defendants, proof having been submitted that the petroleum contained no grease, so that the slippery path could not be due to it.

#### Thousands of Prescriptions.

The Derby Guardians last week received a report from the Dispensary Committee stating that during the year 54,692 prescriptions were made up, at a cost of 204*l.* compared with 52,584, at a cost of 199*l.*, in 1906. The cost of the drugs supplied was 112*l.* The committee recommended that Mr. Shadford's salary as dispenser be increased from 140*l.* to 150*l.*, with a further advance to 160*l.* at the end of twelve months, which was agreed to.

#### Prescribing by Chemists.

In the course of an inquest held at Lambeth on May 13 by Mr. John Troutbeck on the body of a child who died suddenly, it was stated that a chemist, at the request of the grandmother, gave a powder to relieve the child's sickness without having seen the child. The Coroner said it was strange the way chemists did these things. It would be a very rash man, whatever his knowledge, who would prescribe for a person he had never seen, but for a person who had only a chemist's knowledge to do it was foolish. He added, "I am afraid we, the public, are only too apt to ask chemists to do this when we ought not to. It is we who put the pressure on them."

#### Manchester Notes.

Mr. A. B. Stocks, chemist (late of Hyde), has recently purchased Mr. Bryan's business at Withington.

Mr. F. E. Woods, chemist, 230 Cheetham Hill Road, has left the city, and a receiving order on his estate has been issued by the Manchester County Court.

The event of next week will be the picnic to Windermere on the 30th by the staff and employes of Messrs. J. Woolley, Sons & Co., Ltd. The picnic is to celebrate the fifty-years' management by Mr. Geo. S. Woolley, and the invitations are issued by Mr. Woolley to the staff and their lady friends. It is expected that about 400 will be present. The warehouse and works will be closed on May 30.

Photographic chemists are expecting to have a much better season this year, as there are indications already shown by the recent spurt in the sale of cameras and accessories. Chemists and their assistants who are photographers may be interested to learn that a series of excellent classes is held at the Manchester School of Technology at present, at very low fees.

"THE ART OF DISPENSING" is as useful a book as I have for the use of students," writes a well-known teacher of pharmacy. A new edition is now ready.

## Irish News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### A Woman's Position.

The vacant position of dispenser at the South Dublin Union, which has been held by a woman pharmacist (*C. & D.*, May 16, p. 734), has been filled by the election of Mr. Garret Nagle. Miss Buchanan, one of the Guardians, proposed that a woman should be elected (there were two women candidates), and she was supported in this contention by Dr. J. C. McWalter. This proposal was, however, defeated on being put to the vote.

#### The Poisons and Pharmacy Bill.

Mr. T. W. Russell, M.P., Vice-President of the Irish Department of Agriculture, addressing the Council of Agriculture in Dublin on May 19, said:

The Pharmacy Bill, which has twice been the subject of discussion by this Council, has again been introduced in the House of Lords, as a Government Bill, and Ireland is not included within its scope. The Committee has not yet reported, but I have very little doubt that the omission to include Ireland will be rectified, and that a legitimate grievance of many farmers in the more remote parts of the country will be remedied.

#### Personal.

Sir Stanley Harrington, chemist and druggist, Cork, has been appointed by the Government as a member of the First Governing Body of the new Irish University.

Mr. Robert Hastings, registered druggist, Newcastle, co. Down, has been appointed a magistrate for the county of Down on the recommendation of Lord Londonderry, Lieutenant of the county. Mr. Hastings is Chairman of the Urban Council.

Mr. J. J. Lyons, pharmaceutical chemist, Omagh, has passed successfully in metallurgy, anatomy, physiology, histology, and physics in connection with the recent Primary Dental Examination held by the Royal College of Surgeons in Ireland.

At a meeting of the Apothecaries' Hall of Ireland on May 15, the Governor, Dr. Seymour Stutch, L.A.H., gave notice of his intention of moving that the freedom of the Worshipful Company of Apothecaries be conferred on Professor Francis Darwin, F.R.S., President of the British Association, on the occasion of its visit to Dublin. The Governor also announced his intention of entertaining Professor Darwin at a banquet should time allow.

Mr. D. W. Elliott, pharmaceutical chemist, 1 Shaftesbury Square, Belfast, received the prize awarded in the lantern-slide competition by the Ulster Photographic Society at the annual meeting held in Belfast last Monday evening. Mr. Elliott was also second in the aggregate number of marks for print competition.

## Scotch News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### Aberdeen.

The Parish Council of Aberdeen have appointed the following chemists to supply medicines and medical extras to the outdoor poor in the various districts of the city for the ensuing year:

Henry Milne, King Street.  
Robert Hall, Great Northern Road.  
George R. Glennie, Spital.  
Robert Leslie, George Street.  
Hugh M. Dugan, Holburn Street.  
John T. Cran, Victoria Road.  
James Spence, Mounthooly.

The Grand Hotel, Union Terrace, is to be the headquarters of the British Pharmaceutical Conference in Aberdeen.

Sir William Bisset Berry, M.D., who has been (on approval of the King) allowed to retain the title of "Honourable" on his retiring from the office of Speaker of the Cape House of Assembly, is a native of Aberdeen and a graduate



of Aberdeen University. He is a brother of Mr. A. W. Berry, chemist, Aberdeen.

#### Business Change.

Mr. David M. Newall, chemist and druggist, is removing from 184 to more commodious premises at 66 High Street, Dalbeattie.

#### Bowling.

The green of the Denny Bowling Club (of which Mr. J. J. Forbes, chemist and druggist, is President) was opened on May 9 by Mr. J. A. Bailey, of Banknock House, who presented the club with a silver trophy.

#### Contracts.

Mr. James Inglis, chemist and druggist, Moffat, has secured the contract for the supply of drugs, medicines, etc., to the Moffat Town Council during the ensuing year.

Mr. James Reid, chemist and druggist, High Street, Dumfries, has been appointed contractor to the local Parish Council for the supply of medicine during the ensuing year.

#### Edinburgh.

On Victoria Day the employes of Messrs. Gibson & Co., chemists, and their friends, numbering about forty, drove to West Linton.

"Drunken M.P.S." occupied the premier position on the contents-bill of a weekly paper. It referred to old-time members of Parliament.

One of the local papers, in reporting the Bile-beans case, spoke of Mr. Davidson as the "prisoner" instead of the "pursuer," and has apologised.

Mr. J. Rutherford Hill, Ph.C., read a paper on "The Use of Arsenic in Horticulture" to the members of the Edinburgh Botanical Society on Thursday, May 14.

Edinburgh Pharmacy Golf Club.—This club decided the Victoria Day competition at Gullane on Tuesday, with the following result: 1st, winner of Dick Medal and captain's prize, J. A. Cochrane, 88-7=81; 2nd, J. Manson, 91-9=82; 3rd, A. Mallen, 102-13=89.

At Portobello Sea-water Swimming-baths on Wednesday evening, May 13, Mr. John M. Morrison, chemist, 72 Elm Road, Edinburgh, Vice-President of the Edinburgh Amateur Gymnastic Society, was presented with the Royal Life-saving Society's bronze medal and certificate. Mr. Morrison is also an accomplished boxer.

Professor Crum Brown, F.R.S., will retire from the Chair of Chemistry in the Edinburgh University at the end of the summer session. There has been some talk in academic circles in Scotland about the vacancy not being filled up, but the formal resignation was only intimated at the meeting of the University Court this week.

Mr. J. Rutherford Hill has had to correct the "Scotsman" for reporting that Lord Haversham "rather 'sat upon'" him when giving evidence before the Joint Committee on the Pharmacy and Poisons Bill. He vindicates the fairness and impartiality of Lord Haversham's remark that Mr. Hill's evidence was entirely contrary to that of Mr. Middleton, Secretary to the Board of Agriculture.

#### Edinburgh Chemists' Golf Club.

The "Gibson" Medal Handicap Competition was held on the Braids Course on Wednesday, May 13, with the following results: 1, E. Steven, 96-16=80; 2 and 3 (a tie), C. Stewart, 91-8=83 and Geo. Baxter, 95-12=83; 4 (a tie), J. Anderson, 97-9=88, and A. C. Baxter, 100-12=88.

#### Glasgow and the West.

The local wholesale houses are feeling business extremely quiet at present.

Mr. W. Hustler, representing Messrs. Allen & Hanburys, Ltd., is laid up with an attack of sciatica.

Mr. D. Watt, chemist and druggist, High Street, Ayr, has secured the contract for drugs, etc., to the Heathfield Hospital.

Mr. W. Rae, chemist and druggist, has been appointed manager of the drug department of Messrs. Thos. Spears & Co., Great Western Road, Glasgow.

Mr. W. Beveridge, chemist and druggist, High Street, Ayr, whose premises were badly damaged by fire a fortnight ago, has opened temporary premises further up the street.

Mr. W. Henderson, chemist and druggist, for some time with Mr. McCowan, chemist and druggist, Paisley, has acquired the Kirn branch business of Mr. George Stirling, chemist and druggist, Dunoon.

At a smoking-concert given by the ophthalmic class of the Glasgow Optical Society the other evening, a fine gold guard and seal were presented to their teacher and President, Mr. T. S. Baird, F.R.M.S., of the Glasgow College of Optics.

## Welsh News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

#### Business Change.

The East Moors Chemicals Works at Cardiff have been purchased by Messrs. C. E. Peel & Son, of Swansea.

#### Smashing Boots.

On May 13 a motor crashed into the shop-window of Boots, Ltd., in Oxford Street, Swansea, and did considerable damage. The chauffeur, who had swerved to avoid a dray, was slightly hurt.

## French News.

(From the "C. & D." Paris Correspondent.)

A NEW PHARMACIST M.P.—M. Fabre, pharmacist, has just been elected deputy for the town of Clermont-Ferrand (Puy-de-Dôme).

FIRE.—A fire broke out a few mornings ago in a laboratory of the Paris School of Pharmacy, but fortunately it was got under in half an hour, before serious damage was done.

THE CHRONICLE OF THEFT.—Several arrests have been made, and probably more may follow, as the result of a series of thefts of goods carried out in an important manufactory of pharmaceutical preparations in the centre of Paris. The arrests made comprise a herbalist and a pharmacy student, who sold the stolen goods, and a pharmacist of Vincennes, who bought them at a cheap rate.

PHARMACY STUDENTS.—M. Gautier's recently published statistics of the University of Paris show that 1,001 students are inscribed on the books of the Paris Superior School of Pharmacy, of whom 78 are ladies. The male foreigners number 21, the females 4. The steady diminution of the medical and pharmaceutical "population" of the University since 1895 is commented upon.

PHARMACEUTICAL CIGARETTES.—A second pharmacist has been prosecuted by the excise for the sale of eucalyptus cigarettes. In this case, a fine of 16f. was imposed, the Court remarking that the goods were put up in packets having somewhat the same appearance as those used by the Government Cigarette Monopoly; and also that the pharmacist advertised the fact that they could be smoked by anyone and were useful in maladies "caused by the abuse of tobacco," these last words being in conspicuous type.

THE ADULTERATION ACT.—A decree has been issued for the application of the 1905 Adulteration Act, regulating the sale of oils and fatty substances. Article 3 provides that no oil shall be sold as olive oil, neat oil, etc., unless it is exclusively prepared from the product named on the label. The practice of inscribing after the name "oil-grower at . . ." and similar phrases calculated to convince the purchaser that the vendor has lands or establishments in a certain region is forbidden unless such property really exists.

A QUESTION OF NOTICE.—An assistant in a Parisian pharmacy, who received his salary daily, was dismissed. The employer refused to give him anything beyond the day's salary, pleading that daily payment implied daily engagement. The assistant sued him for a week's wages in lieu of notice, and the employer was condemned to pay 56f., with costs. A claim of 500f. entered by the pharmacist "for the prejudice occasioned" by the assistant's "reprehensible attitude in the pharmacy," and the assistant's counterclaim of 200f. indemnity "for prejudice caused by this calumny" were both dismissed.

## American Notes.

(From the "C. & D." Correspondent.)

**MUNYON'S REMEDY.**—Dr. J. M. Munyon was married at Jersey City on April 9 to Miss Pauline Neff, a vaudeville actress. The bride is twenty-four, while the famous homeopathic-medicine proprietor is sixty. The newly wedded pair have gone to Australia for the honeymoon.

**MILLIONAIRE DRUGGIST SHOT DEAD.**—Mr. George E. Sterry, aged seventy-two, the head of a leading drug-establishment in New York, was shot dead in his office in Pine Street, on May 19, by his son George, who objected to his father's intention to marry a Miss Rebecca Blaikie, a schoolmistress of the age of thirty. The son afterwards committed suicide.

**FOREIGN PATENTS.**—For some years the N.A.R.D. have sought to have a federal law enacted curtailing the freedom with which German manufacturers of chemicals secure patents in the United States, which they cannot get in Germany. The Currier Bill has been introduced into Congress, but the N.A.R.D. discover that this essential feature of it has been omitted because it is held to violate certain existing treaties.

**IMPORTATION OF CRUDE DRUGS.**—The United States Government appear to have been particularly active of late in the rejection of several samples of crude drugs. A decision of importance to drug-importers was made public last month, viz.: A drug bearing a name recognised in the United States Pharmacopœia or the National Formulary, and branded to show a different standard of strength, quality, or purity, shall not be regarded as adulterated if it conforms to its declared standard. An example is quoted of *asafetida*, which frequently fails to equal the U.S.P. standard of 50 per cent. resin and 3 per cent. volatile oil.

**WOOD OR METHYL ALCOHOL** has become increasingly unpopular during recent years, as the realisation has grown that it is a toxic agent. One State after another has passed laws prohibiting its use in medicines intended either for internal or external employment, and public analysts, acting on their own initiative, have instituted a number of prosecutions in States where such laws did not exist, on the ground that the U.S.P. does not specify the use of such a solvent, and that preparations containing it are therefore not in accordance with legal standards. Denatured alcohol, provided for under the Federal law passed a year or two ago, is held to be in the same category, since the denaturing agents are methyl alcohol and benzene.

**"CURFORDHAKA BRANE FUDE."**—As reported in the *C. & D.*, April 11, p. 553, Robert N. Harper, the maker of this preparation, was fined \$500 for selling it under a title contrary to the Federal Food and Drugs Act, but the Judge refused to act upon the request of President Roosevelt to impose a term of imprisonment. Harper, though a man very well known and very much respected in Washington, has been compelled to retire from the presidency of a bank and to withdraw from clubs of which he was a member—all of this largely because of the President's desire to make an example of him as the first manufacturer convicted under the terms of the Federal Act. The President's action has been criticised rather freely in Washington.

**SOME VERY INTERESTING GOSSIP** emanates from Washington regarding the status of Dr. H. W. Wiley, who has all along played the Czar in issuing very stringent rules and regulations regarding the Food and Drugs Act. Of late, President Roosevelt has interfered and has removed so much authority from Dr. Wiley in these directions that it is now rumoured to be the doctor's intention to retire from his post as chief chemist to the Government. This result, however, seems exceedingly unlikely. Only a few weeks ago Dr. Wiley was the guest of honour at two banquets held in Washington and New York, where he was toasted and feted in commemoration of his twenty-fifth year of service as a Government expert. Still, it is the fact that he has very slender security of tenure, and it is even said that his public appearances and agitations are a means to justifying his position—which no one denies that he fills wonderfully well.

## India and the East.

(From "C. & D." Correspondents.)

**IN THE STRAITS.**—A well-informed correspondent writes rather gloomily of business in the Straits Settlements. At the moment it is in a wretched state (he says), and many bazaar dealers are on the verge of bankruptcy. Cholera has been rather prevalent all over the islands, and the restrictions in force regarding the sale of poisons are likely to increase the epidemic. For a registered chemist is not allowed to sell any quantity of chlorodyne except on a physician's prescription. The opium law is a farce, our correspondent continues, and he predicts that one day the Straits Government will awake to the fact that there are worse things than morphine, etc., for Eastern people, as cheap native spirit will be substituted, and crime will increase.

**TRADE IN BOMBAY.**—Travellers for home firms have been particularly active in Bombay lately (writes a correspondent), and much more so than the occasion required, this being the slack period of the Indian year. It appears that both the Australian and South African markets have been overstocked, with the result that many travellers found their way to India and effected a ready sale of large quantities of drugs and chemicals. When the goods arrived the consignees were unable to clear them from the docks, so that the different banks and the Customs authorities were obliged to sell them on their own account. Trade has been slow in Bombay since the beginning of the year, and the merchants in the bazaar have been complaining bitterly. If this state of things continues, the outlook for the monsoon period is anything but pleasant.

## South African Customs.

**THE COMMISSION** which was appointed to inquire into the existing Customs Union Tariff has now issued its report, in which is presented a summary of the recommendations put forward by the representatives of various industries in Cape Colony. This is followed by an expression of opinion by the Commissioners as to the wisdom or otherwise of granting additional protection. The Commissioners appear to have gone to considerable pains to sift the evidence tendered, some of it being of a conflicting character, and comments, on the whole, show that they have endeavoured to take a fair view of the many questions submitted. It may be remembered that a duty at the rate of 33½ per cent. on proprietary medicines, toilet-requisites, cosmetics, dyes, etc., was asked, unless they contained more than 3 per cent. of proof spirit, in which case the spirit-duty would amount to more. At present proprietary medicines pay a duty of 25 per cent. *ad val.*, unless they contain more than 3 per cent. of proof spirit, in which case the duty is 20s. per bulk gal. On this point the Commission is not in favour of proprietary medicines being specially taxed, or, in other words, they should not pay more than the *ad val.* rate unless they contain more than 3 per cent. of proof spirit. For this reason the Commission prefers that the present Customs rate (Tariff Item 53) which seeks to tax only such articles as can be described as of doubtful origin, be maintained, with the exception that the duty be 33½ per cent. instead of 25 per cent., or if the medicines contain more than 3 per cent. of proof spirit 20s. per gal., if this would amount to more. It also recommends that the duty on toilet-requisites, such as perfumery, be similarly rated—*i.e.*, 33½ per cent. or 20s. per gal., whichever shall be greater. Another recommendation made by Cape chemists was that the present duty on tinctures, etc., be maintained, except that instead of being assessed as at present at 20s. per gal. irrespective of the strength of proof spirit, the duty should be at per proof gal., plus an *ad val.* rate, so that expensive articles should pay a proportionately high duty. The Commission does not agree with the proposal, and recommends that the duty on tinctures be 30s. per proof gal., and in addition 15 per cent. *ad val.* It was also proposed to levy a duty of 33½ per cent. on stock and poultry medicines, which are admitted at 3 per cent. *ad val.* when imported in bulk, but to this the Commission does not agree.



# Pharmaceutical Society of Great Britain.

The Sixty-seventh Annual Meeting was held in London on Wednesday, May 20.

Preparatory to it the members and their friends dined at the  
Hotel Metropole on Tuesday evening.

THE annual social function, at which much complimentary oratory is usually lavished, was held on Tuesday evening, May 19, at the Whitehall Rooms, Hôtel Métropole. The dinner, *qua* dinner, was irreproachable, the *cuisine* and æsthetic surroundings being all that the most fastidious could desire. The President of the Pharmaceutical Society (Mr. J. Rymer Young) was in the chair, and altogether there were just under 200 present. An analysis of the status of those present is a fair indication of the average composition of the audience at these annual dinners, and to the uninitiated it is rather curious. There were twenty-one distinguished guests and about twenty Press-men; members of wholesale firms and representatives of wholesale houses numbered about sixty; there were over a dozen manufacturing chemists, and the officials of the Society and the Dinner Committee accounted for twenty more, while the retail chemists all told did not number more than fifty. One peculiar circumstance was remarked upon by several diners. This was the fact that the Hon. F. S. Grimwade, of Melbourne, Victoria, and a distinguished member of the Victorian Parliament, had not been accorded a place at the Distinguished Strangers' table. We have recollections of a former occasion on which Mr. Grimwade was accorded a seat of honour and a special toast, but this year "Our Colonies" were, probably through inadvertence, overlooked. Scotland sent a larger contingent than usual, but Ireland was apparently unrepresented. The prominent absentees were Mr. J. Henniker Heaton, M.P., Mr. A. H. Crosfield, M.P., and Mr. G. E. Bridge (Mayor of Bourne-mouth), who, though down on the list, did not appear at the dinner. Mr. R. A. Robinson came in for an hour direct from the chair of the London County Council, had a hurried dinner, then returned to the Council for half-an-hour, and finally came back to spend the evening among his brethren, and to reply to the toast of his health. The following is a list of those present:

Allen, C. B.	Dixon, R. W.
Anderson, G.	Dobson, T. W., M.P.
Armitage, —	Dodd, H. Vincent
Arrow, J. J.	Dodd, W. R.
Arrowsmith, A. R.	Durrant, G. S.
Atkins, W. R.	Eason, F.
Baiss, Arnold	Ekins, A. E.
Baron, R. E.	Evans, W. C.
Barrett, J. T.	Ewing, J. Laidlaw ( <i>Master of the Edinburgh Merchants' Company</i> )
Bascombe, F.	Finnemore, H.
Bennett, R. R.	Flack, A.
Bevan, E. J., F.I.C.	Fogarty, W. F.
Bourdas, I.	Ford, T. M.
Bourdas, I., jun.	Francis, G. Bult
Boyes, A.	Francis, Alan
Braithwaite, J. O.	Fuller, E.
Bremidge, R.	Gamble, F. W.
Brittice, A. B.	Gardner, C. E.
Brook, H.	Gilmour, J. P.
Browne, W.	Glyn-Jones, W. S.
Burroughs Wellcome & Co.	Goldby, F.
Carteighe, M., F.I.C.	Golds, L. G.
Castle, J. W.	Goodall, F. C.
Chalmers, W.	Greenish, Prof. H. G.
Charlesworth, H. H.	Gregory, A. C.
Chater, A. J.	Grimwade, Hon. F. S.
Clayton, W. F.	Gulland, J. W., M.P.
Cleave, T. W.	Gulliver, W. F.
Cofman, J.	Gunn, Alex.
Copper, Lionel	Hanbury, F. C.
Crossley, Professor A. W., F.R.S.	Happold, Carl
Cuff, J. Harcombe	Harman, H.
Davies, T.	Harrington, J. F.
Davis, W. A.	Harrison, E. F.
Dixon, Dr. W. E.	

Hart, G. E.	Procter, H. R.
Harvey, R. M.	Quarrell, W. H.
Hay, W. F.	Raper, J. R.
Hill, C. A.	Redwood, Sir Boverton, F.I.C. ( <i>Society of Chemical Industry</i> )
Hill, J. Rutherford	Richardson, R.
Hills, Walter	Robinson, R. A. ( <i>Chairman London County Council</i> )
Hodgkinson, C.	Robson, B.
Hodgson, C. R., B.A. ( <i>College of Preceptors</i> )	Roe, G.
Holmes, E. M.	Rogers, F. A.
Howard, D. Lloyd	Rogerson, W. J.
Howie, W. L.	Rowell, P. F.
Humphrey, John	Royle, H. I.
Idris, T. H. W., M.P.	Royle, H. W.
Jackson, C.	Royle, J. W.
Jones, G. E.	Royle, Phil
Jones, W. Lloyd	Sanger, E.
Kluge, H. J.	Sanger, H.
Knight, G. J.	Savory, A. L.
Lansdown, G. A.	Sherwood, N.
Layman, C. N.	Shilcock, A.
Leng, R.	Silverlock, W. B.
Lenton, W. H.	Smith, J. H.
Lescher, T. E.	Society of Apothecaries, Master of
Lewis, D. L.	Solomon, A. H.
Lewis, H.	Squire, G.
Linstead, E.	Stamp, F. U.
Lough, Right Hon. T., M.P.	Stevenson, H. E.
Lunan, G.	Stevenson, Sir Thomas ( <i>Home Office</i> )
MacEwan, Peter	Taplin, J. W.
Macfadyean, Sir John ( <i>Royal College of Veterinary Surgeons</i> )	Taylor, C. Sanson
Mackenzie, D.	Thompson, S.
Martin, C.	Tocher, G. A.
Martin, N. H.	Tocher, J. F.
Martindale, Dr. W. H.	Tomkins, W.
Massey, —	Tyrer, Thomas
Millard, E. J.	Umney, J. C.
Moon, H.	Walker, H.
Morson, T. P.	Want, W. P.
Moul, F.	Warrick, F. W.
Naylor, W. A. H.	Watson, J. R.
Newsholme, Dr. A. ( <i>Local Government Board</i> )	Weston, S. J.
Newsholme, G. T. W.	Whiffen, G. G.
Nicholson, T. Goddard, M.B.	Whiffen, T.
Northey, W. G. ( <i>President Chemists' Association</i> )	White, Edmund
Parsons, W.	Williams, T. R.
Penton, W.	Wilshaw, G.
Phillips, A. J.	Winfrey, R. M.P.
Pinchen, W. J.	Woolcock, W. J. Uglow
Piper, F. R.	Woolley, S. W.
Powell, Sir R. Douglas, Bart., K.C.V.O. ( <i>Royal College of Physicians</i> )	Wretts, J. R.
Preston, Lieut.-Col. A. C., V.D. ( <i>Master of the Carpenters' Company</i> )	Wright, A.

On the right of the President sat Sir R. Douglas Powell, the Master of the Society of Apothecaries (Mr. G. Wilks), Mr. R. A. Robinson, Sir John Macfadyean, Mr. Walter Hills, Mr. J. Laidlaw Ewing, Mr. M. Carteighe, Mr. E. J. Bevan, and Professor A. W. Crossley. On his left were the Right Hon. Thomas Lough, M.P., Mr. T. H. W. Idris, M.P., Sir Boverton Redwood, Mr. Richard Winfrey, M.P., Dr. Arthur Newsholme, Mr. W. S. Glyn-Jones, Mr. J. W. Gulland, M.P., Sir Thomas Stevenson, Mr. T. W. Dobson, M.P., Mr. George Lunan, Professor Greenish, and Colonel Preston. The Chairmen of the spur tables were Messrs. J. C. Umney, W. F. Gulliver, R. Bremridge, J. F. Harrington, J. Humphrey, A. E. Ekins, and Isaiah Bourdas.

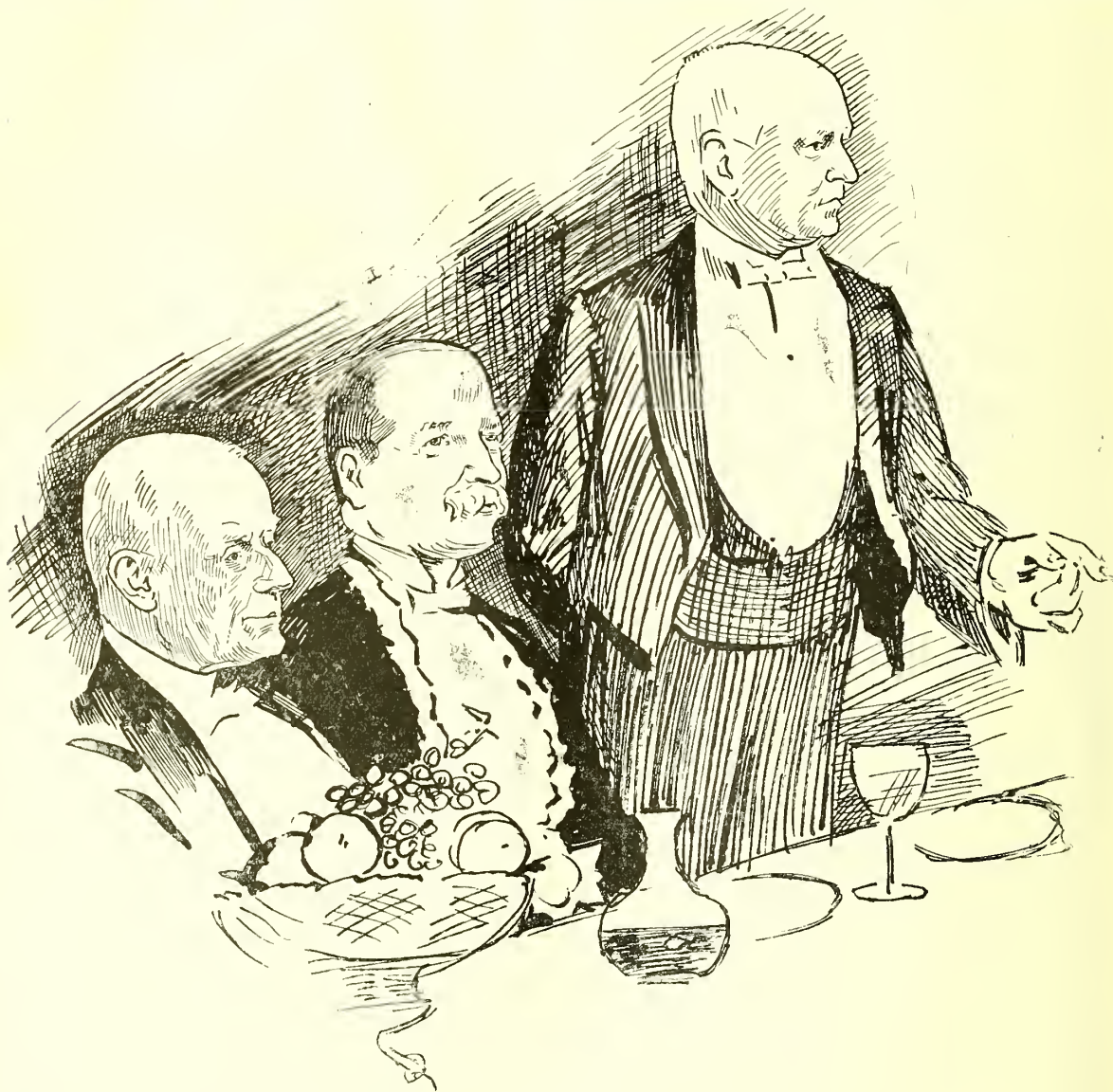
## THE TOASTS.

The first toast was that of "The King," which the PRESIDENT introduced with a few remarks about the loyalty of the body pharmaceutic. The National Anthem was sung, after which, permission having been given to smoke, the President again rose to propose the toast of

## THE HOUSES OF PARLIAMENT.

He said that the Pharmaceutical Society enjoys the goodwill of many members of Parliament without distinction

the chemists' case before an intelligent member of Parliament, that member was convinced of the justice of the case. In regard to the deliberations of the Joint Committee, the President said he was not too hopeful as to the trend of affairs. The proceedings of that Committee concern the very existence of the craft—even the very title; but he knew that chemists would not look in vain for help from their members of Parliament. He also paid a tribute to Mr. Idris's labours on behalf of chemists, and commented on the fact that so many successful business



## MEDICAL, PHARMACEUTICAL, AND POLITICAL.

The genial Lough, whose Irish wit  
Has gladdened us at previous dinners,  
At various things made playful hit,  
Confessed that Lords were not all sinners.

The President, with keen delight,  
Absorbed the M.P.'s playful banter,  
While grave Sir Douglas smiled a slight  
But pensive smile at the decanter.

of parties. Referring to the presence of Mr. Thomas Lough, M.P., the President said he had been a friend of the Society ever since the time when it became necessary to introduce a Bill into the House of Commons. Mr. Lough he characterised as "a sound philosopher, guide, and friend," as well as a loyal and consistent helper. The President then went on to tell of what chemists owe to members of Parliament, and stated that he had always found that whenever an opportunity occurred of placing

men unselfishly devoted their time to the service of the nation. (Cheers.)

The Right Hon. THOMAS LOUGH, M.P., in reply, spoke of the difficulty he had recently in convincing a Russian that the two Houses of Parliament meet in one building. It is a fact, he added, that if the intervening doors were open the Speaker in his chair in the House of Commons could see the King on his throne in the House of Lords. Having thus introduced the subject of the Lords, Mr.



Lough referred to the tenacity with which the Lords cling to ancient customs, but added that there is much to be said in their favour, were it not for their wretched political principles. (Laughter.) A contrast was then made between the two Houses, the one changing every five years or so and the other always the same. The differences between one House of Commons and another are never great, but the present one is noticeable for the business air of its members; and he added, amidst much laughter, for the excellence of the catering department. Mr. Lough then went on to refer to the problem which the Pharmaceutical Society had set Parliament in a Bill which is passed on from Parliament to Parliament with perfect unanimity. (Laughter.) It is not every society that can set such a problem. Some say it is a mere question of title, but that is surely a serious question and one upon which it is worth while keeping up the struggle. He had been much impressed with the ease as put to him some years ago by the chemists in his constituency, who, although few in number, were above the average in learning. "Although I am a Free Trader," added Mr. Lough, "I draw the line at throwing open a title which is earned in the same way as are those of barristers and doctors. The House of Commons is an assembly to which no reasonable appeal is made in vain, and if I can help you in any way my services are at your disposal." (Cheers.)

Mr. T. H. W. IDRIS, M.P., also replied, paying a tribute to Mr. Lough's sincerity in the cause of chemists. Referring to his own work in Parliament on behalf of the craft, Mr. Idris confessed that he was a little disappointed at the results so far of the Joint Committee. Whatever may be the issue of the deliberations of that Committee, he said, chemists must keep their powder dry and be ready to bring influence to bear on the members representing their constituencies in Parliament. Many people say "Thank God, we have a House of Lords," but, added Mr. Idris, "I say, thank God we have a House of Commons." (Cheers.) The House of Lords may look with equanimity while the chemists' privileges are being filched, but he hoped that if chemists would do their utmost to impress their members, a different view would be taken in the House of Commons. (Loud cheers.)

#### THE MEDICAL PROFESSION.

The PRESIDENT, in proposing this toast, said chemists, of most people in the world, were able to appreciate the true value and work of the medical profession. On this occasion



WATER LANE.

The Master of the Hall was there;  
Of pharmacists the Hall is chary;  
But Master Wilks no frown did bear,  
He is no gaunt apothec'airy.

he preferred to think of himself and themselves as members of one gigantic community which understood and appreciated the fact that there is in the midst of this country, with its teeming millions, a large body of men occupied daily and hourly in the honourable, laudable, and elevating occupation of trying to solve problems upon which depend

the question of public health and public welfare—that is what their friends in the medical profession are engaged in. He asked them to drink the health of a body of men who accomplished more really genuine work in the country (apart altogether from the question of remuneration) than any other section of the community. (Cheers.)



ANCIENT MOONS.

The Master Merchant from the North.  
Told of the tips he learnt from Carteghe;  
Sir Michael laughed as each stood forth  
To urge the claims of creed or party.

He laughed with Lough, he smiled with Young,  
He quipped the County Council Chairman;  
He "hushed" aloud as songs were sung,  
And whispered, "Chatter I can't bear, man."

Sir R. DOUGLAS POWELL, who rose amid loud applause, thanked the President for the many kind things he said of the medical profession, and he honestly thought many of the remarks were well deserved. (Hear, hear.) He felt for those members of the craft who are engaged in preventing disease and suffering—those subtle forms of suffering which but a few years ago we seemed to have made no advance against—a debt of gratitude difficult to express. Then it was also acknowledged that the field of surgery within the last thirty or thirty-five years had acquired a power for the treatment of disease which one could not have conceived possible a number of years ago, the power was due to the work of that great chemist—Pasteur. Medicine was also indebted to the practice and methods of the great Lord Lister, who, he was glad to say, was still among them. Then not only in surgery were the advantages of separate methods seized upon, but in the application of medicine to disease also. Every physician and practitioner is well aware that just as he treats internal maladies, he treats external maladies on the same lines—what, in other words, is our friendly treatment of disease but the application of the antiseptic or aseptic treatment. He agreed most heartily with the eloquent words the President uttered in regard to the self-sacrificing manner in which those engaged in general practice responded to the call of duty, and the success they often met with in their methods called forth his deepest admiration. Then the profession had at their call members of an honourable and learned profession who were bound to compound medicines which were prescribed and who were able to vouch for the purity of the drugs they used. He thought he perceived an enormous advance of late years in the purity of the drugs used and in the standardisation of a great many, which fact enabled the physician or practitioner who prescribes a drug to know, for the most part, that his patient is getting what he (the physician) wishes. There is still room for development in this direction. Indeed, there is an enormous amount of work which lies in the hands of the Pharmaceutical Society and the Society of Apothecaries, which is well represented to-night. These two bodies already do much hard work in rendering methods of treatment more precise in this direc-



tion, and although the President was in a pessimistic mood that evening, and talked about fighting for their lives, the cheerful countenances around him did not really convince him that it was so. He hoped they would always have the advantage of co-operation of the "great profession of pharmaceutical chemists" for many years to come. Whatever the House of Commons or the House of Lords might do (he did not think the House of Lords would do any harm) he felt sure that the chemist would be able to take care of himself. Concluding, he thanked them for the kind way in which the toast had been received on behalf of himself and those present representing the medical profession. (Cheers.)

#### THE SOCIETY.

In proposing "The Pharmaceutical Society," Sir BOVERTON REDWOOD said the principal appeal which the toast made to him lay in the wealth of material at his disposal. In 1892 Mr. Carteighe and in 1894 Mr. Hills had separately reviewed the work of the Society without completely exhausting the subject on either occasion. He had been duly warned not to be lengthy in his speech, so he would be satisfied if he were able to do ever so little to remove the erroneous impressions prevalent concerning the Society. Sir Boverton then gave in detail the objects of the Society as founded in 1841, and said that the way in which these laudable objects had been carried out was worthy of the highest commendation. The educational demands had been well met, and the original aims of the founders had been well carried out. It was in the unfortunate use of the word "protection" in connection with the aims of the Society that the greatest misapprehension of the Society had arisen. "It has never been a trade-protection society," he said, amid sympathetic cheers, "but it has protected the chemist and druggist by elevating his status and raising him to the position of a scientific and professional worker. The Society had worked for the protection of the public rather than the chemist, and its work had never been carried out solely in the interests of its members. Whatever benefits have been secured have been shared by registered chemists and druggists as a whole." Speaking for himself, Sir Boverton said he had every reason to be grateful to the Society's school, for there, as assistant



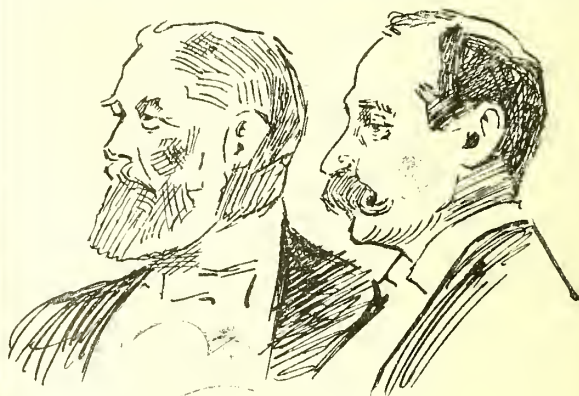
#### OIL ON THE TROUBLED WATERS.

The knightly Redwood raised his glass,  
And pledged his gracious Alma Mater;  
Through olden times he made us pass  
When every man was a first rater.

to his father, he had acquired such knowledge of chemistry and pharmacy as he possessed. He recalled pleasant memories of Professor Bentley and the late Elias Bremridge, and he was pleased to know that Mr. Rymer Young was a pupil of his father's at the school in 1872. (Applause.)

The PRESIDENT, in reply, thanked Sir Boverton for the kind things he had said about the Society and its President. He had endeavoured to the best of his ability to do all that, so far as he could judge, members of the Society desired. He reiterated the fact that he is a middle-class chemist in a middle-class town, and he is thus fully cognisant of all the difficulties of the ordinary chemist's busi-

ness. He had on all occasions been, at least, straightforward and candid, and he was not sure that any man can do much more. If he had failed, he asked them to remember that in the fulness of light and knowledge that which is desirable is often by no means possible. He had recently figured somewhat prominently in public in connection with the Joint Committee, and he had received many indications that the attitude he took up was approved of by chemists



#### THE HOME OFFICE AND THE NORTH.

Sir Thomas, from his lab. detached,  
With charm bewitched the warlike Lunan;  
Perchance they talked of bodies snatched  
From arsenic poisoners darkly croonin'.

Perchance they spake of things the most  
That all men talk of hourly, daily:  
The "drama," "music," "fortunes lost,"  
Or "thrilling scenes at the Old Bailey."

generally. The result of the deliberations of the Joint Committee is not yet available, and he feared it might not be quite so satisfactory to chemists as they would like. "If I might venture to prophesy—always a risky thing to do," continued the President, "I am inclined to think that the gods are not with us." (Laughter.) "But the gods are not always right, and I am positively unable to understand the attitude of those who cannot differentiate in this matter between the rights of the qualified man and the mere shareholder." ("Hear, hear," and applause.) "With regard to the Society, as Sir Boverton Redwood had said, it had concerned itself with nothing more than the education and uplifting of chemists. It had been from first to last an educative body. It had not interested itself in trade, but had kept strictly on professional lines." (Applause.)

#### AN INNOVATION.

Mr. MICHAEL CARTEIGHE, in the absence of Mr. Winfrey (who had departed for the House), proposed "The Chairman of the London County Council." Mr. Robinson, he said, is a man who is really alive. "He talks well, eats well, and speaks well, but whether he has any time for thinking I really don't know." Whatever work Mr. Robinson has in hand his brethren know from past experience that he can do it well and thoroughly. (Great applause and cheers.)

Mr. R. A. ROBINSON, in responding, said it was the first time he had ever been the guest of the Pharmaceutical Society, and he thanked Mr. Carteighe for the kind things he had said about him, although he did not quite understand all he said. (Laughter.) After a brief reference to County Council affairs Mr. Robinson went on to pharmaceutical matters. With regard to the Joint Committee's deliberations, he hoped Parliament had not changed its mind with regard to chemists since 1868. It was still of the greatest importance that the safety of the public should be continued on the lines laid down in 1868, and he hoped Parliament would not depart from that. The essential thing still remains that the man who sells poisons should be trained and qualified. Although he (Mr. Robinson) was apparently at the moment drifting away from pharmacy, he still took the keenest interest in matters pharmaceutical, and would do all he could either in his official or private



capacity to try to help his brother chemists in securing their just rights. (Applause.)

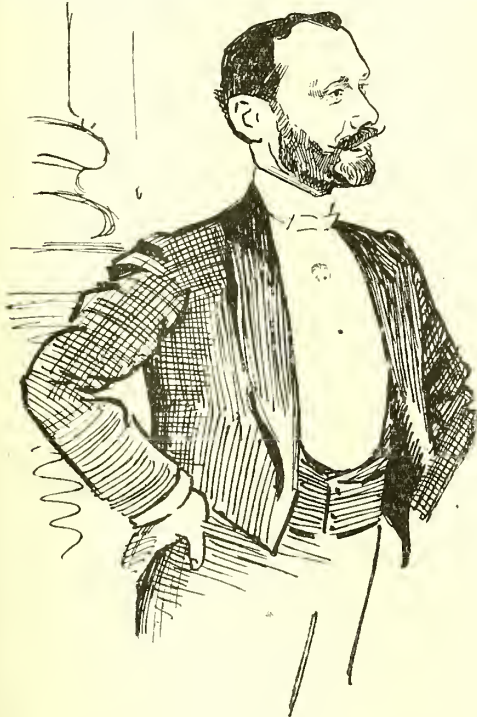
The final toast, "The Guests," was given from the Chair, and was replied to in the first instance by

Mr. GEORGE LUNAN (Chairman of the North British Branch), who said that if only the Scotch members of the Society could march on London in their kilts he felt sure they would do something for the Pharmacy Bill. His advice to the Society was Go on! Go on! Go on! The heather's on fire, he said, and Scots chemists will back their Southern brethren in the fight for their rights.

Sir JOHN MACFADYEAN, who also replied, was glad to think that relationship of a most harmonious character had always existed between the Royal College of Veterinary Surgeons and the Pharmaceutical Society.

Mr. J. LAIDLAW EWING, whose name was likewise associated with the toast, was reminiscent of his training under Mr. Carteighe when he (Mr. Ewing) was Chairman of the North British Branch. He also paid high tribute to the excellent tuition he received from Mr. Rutherford Hill, who, he was delighted to observe, had made so effective an appearance before the Joint Committee.

This closed the eloquence, which was beaten by the music.



THE IMPRESARIO.

When trouble comes and things go wrong,  
They're put aside till "sometime later";  
If this is right or that is wrong  
You'll find out if you go to Chater.

#### COUNCIL ELECTION.

The poll was declared at 3 o'clock on May 21. The Chairman of the Scrutineers was Mr. W. F. GULLIVER, and he read out the following results.

Young	...	...	...	...	2,626
Hobbs	...	...	...	...	2,462
Harrison	...	...	...	...	2,430
Harrington	...	...	...	...	2,389
Park	...	...	...	...	2,337
Carteighe	...	...	...	...	2,034
Cuff	...	...	...	...	1,973
Gibson	...	...	...	...	1,800

The first seven are therefore elected. The number of voting-papers which was issued was 6,280, but of these 3,364 were not returned. Votes of thanks to the scrutineers were carried.

## ANNUAL MEETING.

THE annual meeting of the members was held at 17 Blombury Square, London, W.C., on May 20. The weather, which was dull in the early part of the day, seemed to correspond to the depressed spirits of many of those who were present. It was a dull meeting, and even the quips and cranks of Mr. Pentney and Mr. Knight fell rather flat and failed to put the members in a better humour. The pessimistic state was doubtless due to unofficial intelligence regarding the adverse report of the Joint Committee of the Houses of Parliament on the Poisons and Pharmacy Bill. The only glimmer of hope was the suggestion of Mr. Glyn-Jones to start a Parliamentary Defence Fund to be devoted to opposing the Government Poisons and Pharmacy Bill. This proposal was put into the form of a separate resolution, and was unanimously approved of. The President spoke for about twenty minutes, and in the discussion which followed there was scarcely any serious criticism of the past year's work of the Council.

The meeting was a little late in beginning; it was not till ten minutes past twelve that the President came into the lecture-theatre, to be followed after an interval by the Vice-President (Mr. J. F. Harrington), the Treasurer (Mr. Walter Hills), and the following members of Council: Mr. C. B. Allen, Mr. A. S. Campkin, Mr. M. Carteighe, Mr. John Harrison, Mr. A. E. Hobbs, Mr. G. T. W. News-holme, Mr. P. F. Rowsell, Mr. E. White, and Mr. A. C. Wootton. The President sat at the table with the Vice-President on his right, while on the left were the Secretary (Mr. Richard Bremridge) and the Solicitor (Mr. Quarrell). Mr. Geo. Lunan (Chairman of the North British Branch), Mr. J. Pinkerton Gilmour (Vice-Chairman), and Mr. J. Rutherford Hill (Assistant Secretary in Scotland) officially represented Scotland. Among the other members present were Mr. J. T. Barrett, Mr. F. Bascombe, Miss Bedell, Miss M. Buchanan, Mr. W. M. Campbell, Mr. R. Feaver Clarke (Gravesend), Mr. J. Harcombe Cuff, Mr. J. Wellesley Douglas, Mr. H. Fennemore, Mr. J. Ford (Kirkmuir), Mr. John Fuller, Mr. F. Goldby (Enfield), Mr. W. S. Glyn-Jones (Barrister-at-Law), Mr. W. F. Gulliver, Mr. A. W. Hanson (Sidecup), Mr. E. F. Harrison, Mr. W. F. Hay (Aberdeen), Mr. V. C. Hewlett, Mr. A. Higgs, J.P. (Kingston-on-Thames), Mr. W. Lamond Howie, Mr. T. H. W. Idris, M.P., Mr. G. J. Knight, Mr. T. Mahen, Mr. J. Mackenzie (Edinburgh), Mr. N. H. Martin (Newcastle-on-Tyne), Mr. W. F. Mawer, Mr. J. C. Pentney, Mr. W. Prior Robinson, Mr. C. E. Sage, Mr. S. L. Stacey (Auditor), Mr. A. E. Tanner, Mr. J. W. Taplin, Mr. J. F. Tocher (Peterhead), Mr. E. A. Umney, Miss Wren, Mr. W. J. Uglov Woolcock, Mr. A. Wright, and Mr. R. F. Young (Barnet).

The PRESIDENT called on the Secretary to read the notice convening the meeting, and, this having been done, it was agreed to take the annual report as read.

#### THE PRESIDENT'S SPEECH.

The PRESIDENT then said: Gentlemen, on the occasion of the last annual meeting it was complained that these annual reports are very monotonous, but, for the life of me, it fails me to understand how they can be so. They form records of something attempted, and something done, even although that may be all they may contain. I notice the presence of several gentlemen, including Mr. Pentney. That, I think, is sufficient guarantee that the proceedings to-day will not be allowed to be too deadly dull. ("Hear, hear," and laughter.) Now, in submitting to your notice this report, which is our sixty-seventh, you will note with satisfaction, as I do, that the membership has been fairly well maintained. Indeed, I think the number stands, at the present moment, at a higher figure than ever before—certainly it is so in my own experience. That is certainly a satisfactory fact, and one at which no one need grumble. But there is one defect which we still deplore, and it is this—that such a large proportion of pharmacists who ought to be within the inner circle of membership remain outside it. (Hear, hear.) You will be pleased to see that our

#### FINANCIAL POSITION

is distinctly better, and in view of the fact that all of us have individually experienced the financial straits of the



times—at any rate that is my experience, if not that of all of you—we have reason to congratulate ourselves that, so far as the finances of our Society are concerned, we are in a distinctly better condition. The balance-sheet is a delicate affair to handle. (Hear, hear.) All balance-sheets are complicated affairs. (Applause and laughter.) And while discussing the question of balance-sheets, may I mention that every tradesman in every town should have impressed upon him the importance of having one? As a business man the first thing I have to deal with is the figures for the past year compared with those of the previous one. I suppose you have looked up the amount of expenditure and compared it with the year that has gone. That is what I propose to do to-day with reference to the question now before us. You naturally look at the expenses side of the account. Well, in 1906 we expended about 15,800*l.*, and in 1907 we spent 14,800*l.* That is to say that, roughly speaking, we have made a saving of 1,000*l.* Now, if anything, the Society has been more vigorous, not to say aggressive, in 1907 than it was in the previous year. Hence, the policy of economy combined with efficiency followed by the Council has borne good fruit. (Hear, hear.) The policy of saving money has been rigorously pursued, but not at the expense of efficiency. The income has been 100*l.* more than the previous year, chiefly from registration fees, and the net result has been that, financially, the Society has improved by about 1,200*l.* Investigating matters still further we find that the loss on the "Journal" was 950*l.* less than last year, although—and I think you will agree with me—the "Journal" has gone on improving in its quality. (Hear, hear.) That is quite satisfactory. Well, gentlemen, we are not altogether satisfied. ("Hear, hear," and applause.) It is not our nature to be satisfied. (Laughter.) We are like Oliver Twist—we are wanting more—but it is quite certain that having discovered a policy which is productive of so much good, we shall develop that policy to our own advantage. I hope that these efforts may be regarded more as being in their initial than in their finished stage. (Applause.) The charges for gas, electric lighting, taxes, and rates have a tendency to creep up. These form items of expenditure which no careful management can touch, so far as the charges are concerned. That, I believe, is your own individual experience in the matter. Economists are all practical in their dealings. They may occupy the same premises, and use the same number of electric lamps or gas-lights, but the charges creep up all the same. That is the experience of us all. At any rate, I cannot encourage any hope of economy in these directions. We are not conscious of any wastage at all in this connection. We have very handsome premises—premises of which we need not be ashamed. You will not, therefore, grudge the 400*l.* or 500*l.* spent in builders' fees and repairs in maintaining proper conditions in these buildings. The law-costs have swallowed up 314*l.* in addition to the fines imposed and the costs awarded in cases of prosecution. That has meant an increase of 77*l.* on the year, but still it is below what generally has been spent by the Council in carrying on the general work connected with the administration of the poisons laws. There may be gentlemen who do not agree with me on the matter, but as we spend from 300*l.* to 400*l.* more in costs for law prosecutions than we receive in the form of fines and costs, I think I am justified in asking people who belong to our trade, but not to our Society, to consider once again how unfair it is to stand aside and derive benefits from successful prosecutions relating to their business to the cost of which they do not contribute one farthing. (Applause.) Expenses of the North British Branch are apparently mounting up, but in a very trifling degree. They amounted to 872*l.* odd as against 854*l.* odd last year, a difference of about 20*l.* And in the report of the Executive Council reference is made to the fact that there has been an increase of two members. That has to be noted. Well, looking at the matter from a local or geographical standpoint—and I must look at it from that standpoint—it seems that the two members additional has meant an extra 19*l.* (Laughter.) We do not look at the matter from so paltry a view, because we realise—as I realise since you put me in the position I now occupy—that our good friends in the North do good work—extremely good work—for the moderate outlay. The income from

## THE SCHOOL OF PHARMACY

amounted to 1,059*l.*, and the expenditure to 2,500*l.* odd, so that the promotion of pharmacy has cost us over 1,500*l.* A further outlay will be necessary during the next year in this department of our work. As regards our chemical laboratories, I am not prepared to say that they are the newest in the country, but, at any rate, they need modernising, because they are far below the standard we ought to have. (Applause.) Well, gentlemen, the Council has only one standard to follow. That standard can surely only be the best, and so long as the members of the Society continue to give their support to the policy of the Council, and continue the virtues of providing the best equipment, the best accommodation, and the best teaching possible, the success of the school will be assured. (Hear, hear.) Of course, these excellent arrangements involve expenditure. You all know that you cannot have anything worth having without paying for it. As a man of ordinary business capacity—and I claim to be that—I should say that it is better to put up with the expense than to starve your school by alleged economy. I hope, therefore, that you will absolve myself and my colleagues for having spent nearly 300*l.* more than usual in forwarding education. There is one item on the expenditure side that ought to be accounted to us for righteousness. (Laughter.) We last year saved 30*l.* in Council's travelling expenses. ("Hear, hear," and laughter.) More than that, as a result of the exercise of self-sacrifice, we spent 7*l.* less in refreshments for the Council. (Laughter.) I can commend this noble sacrifice to your favourable consideration. (Laughter.) You will see from the report that

## THE EXAMINATIONS

are still being carried on to the satisfaction of the visitors appointed by the Privy Council, who, of course, keep us in order on this matter. That is a matter of satisfaction to us. The efficiency of the school is being well maintained, and we have every reason to be proud of the way the business is being carried on there. The percentage of passes of our own candidates indicates that we, at any rate, are giving as good an education as can be obtained in England on pharmaceutical matters. (Applause.) During the past year there was

## A MAGNIFICENT LIST OF PAPERS

read in Scotland, as well as in England, to members of the Society, and we desire to express our gratitude to the gentlemen who were concerned in getting them up. The preparation of these papers must have entailed upon the writers an immense amount of time and labour, and we are indebted to them for the work they have done for us, as well as for the public benefit. Those men who can find time, and who have the inclination and ability to write good papers, receive no pecuniary reward, but still they must have a great measure of the satisfaction which comes to anybody who tries to help the big ship along.

During the year it is satisfactory to note that our library and museum have been very much used, so that whatever these two institutions may cost it is satisfactory to know that they are being made full use of. They are excellent institutions, and I am glad to say that both Mr. Knapman and Mr. Holmes continue to make themselves intensely useful to all who make inquiries at each of them. (Applause.) You will notice, gentlemen, that during the past year we have been busy in

## ORGANISATION MATTERS.

I do not intend to go deeply into the question, but you will remember that two or three years ago a series of meetings were arranged of a public character. The object of these was to educate the public as to our various Bills—to make them understand our aspirations and our position in the world. We have every reason to believe that these meetings did a great amount of good, and fulfilled the purposes they were designed for. They educated the public to a very great extent, as well as a large number of our members who sadly needed education. In this connection we also organised a series of meetings in various large towns, at which nearly all the chemists in each town were present. I say quite unreservedly that these meetings were productive of a great amount of good. If



I might use comparisons I should say that the first was the poorest of the lot, and I merely suggest that we gained experience largely from our failures in London. At these meetings there were eighty, seventy, and sixty members present. They were always very representative, and consisted not merely of members, but of delegates and officers. I can assure you that they afforded novel opportunities for explaining away misapprehensions and mistakes in a friendly sort of way, and gave me an opportunity of making myself personally acquainted with the large mass of our members. The whole effect has been healthy and exceedingly useful. (Applause.) I am absolutely certain that the organisation has been well worth the outlay it entailed. (Hear, hear.)

I am not quite sure what I should say with reference to

#### PARLIAMENTARY MATTERS.

You are aware, of course, that the matter of the Pharmacy Bill has just recently been dealt with, and, I believe, is still under the consideration of a Joint Committee of the House of Lords and the House of Commons. You are also aware that the Council of the Pharmaceutical Society has had, through one or two of its officers, to put the views of pharmacists before that Committee. It would be highly injudicious at the present juncture, while the matter is being considered and is *sub judice*, to go into the question. We are still waiting for the report, and, while one may speculate in one's mind as to what it will contain, after you have read the evidence, as intelligent beings you will not find it difficult to form your own impression as to the trend of affairs. At the same time, we must have an official communication and the report before we can say exactly where we are. You are also aware that with the object of getting our views put before the Joint Committee we had introduced into the House of Commons, through the kindness of Mr. Winfrey, a little Bill of our own. You are all familiar with its terms. The Council found that it was hopeless to go on with the directors clause, and so it has been dropped. One of the particular features of the Bill is that clause which would amend the system of registration, giving our officers power of entry and to ask for the authority under which a man conducted a chemist's business—that is to say, to obtain his name and address. As is well known, it is an extremely difficult thing sometimes to get a man's name and address in order to ascertain whether he is qualified or not. Another clause in the Bill is the one which provides for the possibility of eventually establishing a curriculum, and another clause which would enable the Council to divide the Minor examination into two. That clause seems not to cause any dissatisfaction in the matter of position, and if we want it particularly we should get it. There is another clause, which is the most serious of all, and that is the question of title. You will agree with me, if I take the experience I obtain from my visits all over the country, that there is a most unanimous demand that the Council should devote all its energies to obtaining a proper recognition of our title. (Hear, hear.) With that view the Pharmacy Bill has been framed. It puts companies and widows and executors, as well as corporations, on the same footing. As things exist there is a positive advantage and benefit given to companies, which we think intensely unfair to properly qualified pharmacists, and the Bill brought in under the auspices of this Council is intended to remedy this. It is not intended to give advantage to any individual, but has been introduced with the view to a general levelling up. I have refrained from discussing the matter. I think it would be inadvisable to do so. We do not know what the report may be, and it is generally held to be unwise to discuss things that are under the consideration of the Joint Committee. With these few remarks I may now conclude. I should only like to add that we have had a very strenuous year. The Council has had a great deal to do. Indeed, I do not know of any year in which such an enormous amount of routine work has been included. I can assure you that the officers have been kept very hard at it. We have received uniform consideration and support, and that is the reward, I suppose, to which we have the right to appeal. (Applause.) I have now to move that the annual

report and statement of accounts, as submitted, be received and adopted.

The VICE-PRESIDENT formally seconded the motion.

#### A VOICE FROM THE NORTH.

Mr. J. MACKENZIE remarked that it was a curious thing that on that occasion they should meet in that old room with its terrace of forms which scarcely afforded them room for their knees; and asked whether for the annual meeting members might not have the use of a more suitable room in those magnificent and spacious premises. (Hear, hear.) Proceeding, he expressed the opinion that, although the report before them was the sixty-seventh, the Society still seemed to be marking time. They had reason to expect some reward for the proficiency which it was necessary for them to attain, but he regretted that the reverse was the case at the present day. Looking back on the past, and remembering the work that was accomplished by the old warriors of pharmacy—and he had his share of it—he was surprised to find the small amount of benefit it had brought them. If the founders of the Society could have had revealed to them the fact that as a result of their efforts pharmacists of the present day would be in no better position than they were, that Society would never have been in existence. They fought like Trojans for the Pharmacy Bill, and expected that it would bring them to a land flowing with milk and honey. But instead of this it had led them to a land of Marah. But still he was not discouraged. If what they aimed at was worth having it was worth fighting for. (Applause.) Referring to the question of examinations, Mr. Mackenzie described it as a hardship that young men should not be credited with the passes they made in certain subjects, where they might fail in others. The present system, he said, involved a method of battledore and shuttlecock which greatly discouraged students, and as a result they very often left pharmacy and went into the medical profession. Under existing conditions they could not get apprentices.

The TREASURER asked whether Mr. Mackenzie, as a Scotsman, wished to lower the standard of preliminary education which was at present required.

Mr. MACKENZIE explained that his point was that where a student passed in two or three subjects and failed in others, he should be credited with those passes, and should not be asked to go over the same subjects when he again came up for examination.

The TREASURER: That I submit is not an answer to my question. Does Mr. Mackenzie wish to lower the standard of education?

Mr. MACKENZIE: No, not to lower it. I only desire to give the young man credit for what he has passed.

The TREASURER: That is not an answer to my question.

The PRESIDENT: The meeting will obtain the impression that Mr. Mackenzie does mean to lower the standard.

Mr. MACKENZIE: The standard ought never to be higher than the exigencies of the case require. Continuing, he remarked that a larger number should be encouraged to enter the trade. This, he thought, would benefit the members generally. He urged the importance of organisation as a means of bringing in those who were not members of the Society. After congratulating the Chairman on the evidence he gave before the Joint Committee Mr. Mackenzie referred to one or two items in the balance-sheet. He asked if the Council had any right to utilise the funds of the Society for publishing books such as the Codex that was now being published. Who, he inquired, was its editor? He observed that the cost of this was 943*l.*, and the income 346*l.* Wherein did the economy come there? Then, again, he observed that the "Journal" had involved an expenditure of 1,561*l.* He desired some information as to its management. It was a difficult thing, he thought, to secure economy with such figures before them. Then, again, he had to note the increase in the charges for rent, taxes, and insurance. The amount shown was the largest he had seen in his experience.

#### THE HUMOUR OF IT.

Mr. PENTNEY said he quite sympathised with many of the things that had been said by their friend from over the water. (Laughter, and a Voice: "From over the border.") Well, what he had said was near enough.



He congratulated the Chairman on presiding that day, and the Society on having a President who gave such excellent evidence before the one-sided Committee that sat in the House of Lords. It was one thing to be a listener to a man who was giving evidence and another to be in the witness's chair, and he might say that their President did credit to the Society on that occasion. (Applause.) Having expressed a desire to criticise one or two matters, Mr. Pentney said that on these occasions they had to listen to the same old tales. There were gentlemen there who sat like Stoics, and never turned round to reply to any criticism that might be offered. It would be a very acceptable innovation if some of them did so instead of leaving it to the President. There had been some criticism as to the "Journal," and he should like to say a word or two on this matter. In the first place he wished that the late President, who had been removed to a higher and warmer sphere of work, had before he left them established a "commercial audit" of the Society's accounts in this connection. If they could be given a debit and a credit side they should then know whether the "Journal" paid or not, and for this reason he should like to see its accounts placed on a commercial basis. He was rather afraid, however, that it would be a long time before they got this. He did not see the editor present, but he could not refrain from saying that there might be some improvement in the "Journal." This might be effected if they did not have so much Codex. Codex was undoubtedly very good, but when they got too much they got sick of it. (Laughter.) The "Journal" ought to be better-informed and contain better reports of meetings, instead of curtailing them as it did. It seemed to him that there was some bungling—but then he had better be careful, or he should be threatened with a writ. He desired to know to whom the "Journal" belonged. Was it the property of the contributors, of the subscribers, or of the Society?

The CHAIRMAN: It is the property of the Pharmaceutical Society.

Mr. PENTNEY: Well, Sir, I take it that the editor is the servant of ourselves, and we are entitled to criticise our own servants. I want to make sure of this. Threats of writs are awkward things, although I do not take much notice of them. I get one now and again, but the writs never come off. (Laughter.) After expressing regret that the editor of the "Journal" was not present to answer for himself, Mr. Pentney proceeded to criticise one or two items in the accounts. He remarked that they had a Secretary of whom they were properly proud. The accounts showed 600*l.* down for the Secretary. For his own part, when he went about the country he boasted of the Secretary who received 600*l.* a year. It was not everybody who could afford to have a Secretary with that salary. (Laughter.) But unfortunately the accounts did not really reveal the whole of the greatness of their Secretary or the whole of their own, because there was 200*l.* not credited to him which was hidden away in the accounts as assistance and something of that sort. He personally should like to see appearing in the accounts the item "Secretary of the Pharmaceutical Society, 800*l.*" Look how much bigger they would appear. (Laughter.) Something had been said about organisation; but this seemed to be some kind of mysterious affair that none of them knew about. Some belonging to Associations and selected as delegates had gone back and said, "Mum's the word. You can't say anything about it." But they were to be thrown absolutely in the shade because they had got an Association started by their friend Mr. Woolcock—

Mr. WOOLCOCK: On a point of order, Mr. Chairman, I do not know if Mr. Pentney is speaking to the report. If he is doing so, I shall claim the right to reply.

The CHAIRMAN: I am sorry that he did not bring his notes. (Laughter.)

Mr. PENTNEY: If I had brought my notes you would be a bit sorrier still. (Loud laughter.) You would certainly have required to adjourn for luncheon and have a little refreshment. (Renewed laughter.) I was simply saying that my friend Mr. Woolcock is to bring about an Association which, among other things, I believe, will give old-age pensions at the age of thirty-five—before or

after—(laughter)—and I am rather glad to find that the Pharmaceutical Society is backing him up. I have not, of course, all the enthusiasm and youth of my friend, but I hope that the Pharmaceutical Society will give him a backing-up, and also those little schemes brought forward for the benefit of chemists generally. I do hope that the Pharmaceutical Society will not look, as our friend has said, too minutely upon the educational question. The cry has been, "With higher education everything will come right with the chemist"; but it has not come. Our profession will be made better if our trade interest is looked to more than it has been in the past. ("Hear, hear," and applause.)

#### CONSTRUCTIVE CRITICISM.

Mr. GLYN-JONES, who had a very cordial reception, said he rose at that juncture to move an amendment to the resolution, or something in the way of amendment. To it he would like to add the words "and that this meeting asks the Council to take into consideration the immediate establishment of a Parliamentary Fund for fighting the Pharmacy Bill." The reason I suggest for this, said Mr. Glyn-Jones, is that one is accustomed to see leaders of the political parties confer with their followers at annual meetings, and the leaders, with a sense of their responsibility, are always careful to act and speak within certain well-defined limits. They do not expect the rank-and-file of their party to act in the same way, and if the annual meetings broke up without the rank-and-file asking the leaders to go further than they apparently care, these leaders would be disappointed. I want this meeting to show the Council that in any steps it takes to bring about the failure of the efforts of those who want in effect to repeal the 1868 Act it will receive the active support of the rank-and-file of the chemists and druggists. ("Hear, hear," and applause.) I sympathise with you, Sir, in the delicate position you hold. The Pharmacy Bill is at present before a Joint Committee of the House of Lords and the House of Commons, and there is such a thing as being brought before the House for any breach of privilege. But I ask the meeting to take the stand I suggest, not because of anything the Joint Committee are doing, or what they are likely to do—that is not necessary, surely. But we have got a Poisons and Pharmacy Bill for which the Government of the day is responsible. That Poisons and Pharmacy Bill must be looked at, for the purpose of this meeting, as it stands, without any amendment. We have a right to assume that the Government mean that that Bill embodies their views as it stands. We have not to assume that any amendment on it shall be made for the present. It is the Government Bill—the Bill that the Government is going to ask Parliament to accept. Two days ago, in talking to a member of Parliament who has not openly identified himself with the matter, whose name does not appear on the back of the Bill, but who perhaps is one of the best qualified to come to some decision on the whole matter, he told me that if this Bill were to come before Parliament in its last stages in its present form, he would ask Parliament, rather than let it pass, that they should repeal the 1868 Act. It was, he said, fairer to pharmacy that this should be done. If that is the opinion of an expert member of Parliament, who understands the position from agricultural and pharmaceutical standpoints, as well as from the public point of view, it is time this Society, through its Council, took its coat off and showed whoever is responsible for the Bill that we are not going to have it. (Applause.) I do not see why we should await the report of any committee. This is a Government Bill, and I want to know what we are going to do, and that immediately, to block it and prevent its becoming law. I assume that everybody in this room is satisfied that we should prevent it becoming the law. I sometimes doubt whether the rank and file of chemists quite realise what this Bill means. (Applause.) I doubt it very much. Dealing with the clause of the Bill relating to agricultural poisons, Mr. Glyn-Jones said he was satisfied of one thing, and that was that arsenic should not be included in the list of agricultural poisons. He was satisfied for two reasons: the first was that arsenic for agricultural purposes is not essential, and the second that arsenic used as a sheep-dip is only a poor substitute for other things that could be used with less danger.



For these reasons he opposed the inclusion of arsenic in that clause. What is the use of including arsenic in the clause, he asked, if in the same clause they give a Government Department power to ignore the present Schedule and include it and other poisons in the list of agricultural poisons? Is that fully recognised by the rank and file? The Bill is one which it is the bounden duty of every chemist and druggist to fight. He was not in a position to discuss what is likely to be the result of the Committee's deliberations, but he had an opportunity of hearing the evidence given before the Committee, and he had also the opportunity of hearing members of the Committee ask questions. He had some little experience in knowing whether a man, when he asked a question of a witness, was desirous of obtaining information or was cross-examining the witness. (Laughter and applause.) He had no hesitation in saying that nine-tenths of the questions put to pharmaceutical witnesses were questions which, properly speaking, would have been put by cross-examiners. In support of this view Mr. Glyn-Jones quoted the last two questions put to him by the Chairman of the Committee (see *C. & D.*, May 16, p. 743), following upon the answer he gave to an interrogation put to him by Mr. Idris, a gentleman, he said, whom they ought heartily to support. Continuing, Mr. Glyn-Jones said he could have no faith in a report which is to come from a Committee the Chairman of which asked him the question he did. (Applause.) The Chairman is entitled to his view, and he (Mr. Glyn-Jones) was not complaining, but he desired to ask if there is any precedent in English law for depriving a man of a title that he had won under statute regulations, thus depriving him of the benefits to which he is entitled by having spent his money and his time in training and tuition? (Applause.) Referring to the question put to him by the Chairman of the Joint Committee, to the effect that by granting to others the privilege enjoyed by chemists of selling poisons nothing would be taken away from the chemist, Mr. Glyn-Jones said that he knew very little difference between taking a thing away from a man and asking him to share it with other people. (Laughter and applause.) The question referred to showed at any rate that they had not much to hope for from the Chairman and the Committee. Whether they had anything to hope for or not, they had no right, and the Pharmaceutical Society as a Society had no right, to look to the Committee to help them. They must be ready for the most hostile attitude, and it is necessary that the Pharmaceutical Society should have a considerable fund of money behind it in order to be prepared. (Applause.) He did not say that they should be prepared to take the view of another great trade and threaten to withdraw their subscriptions from hospitals if the Government proceeded with the Bill, but he did say that they might take a leaf out of the books of every other organised body by affording the means of fighting measures opposed to their interests. They should turn the meeting into a permanent committee to fight the Bill. They must have people who would devote their time and money in travelling if necessary at a moment's notice to any part of the country. They must show, at any rate, that they are not going to be beaten by reason of the absence of facilities for fighting. The people who are fighting the chemists are spending their money. He was sure that, taking the register of chemists, there are those who, while they could not afford to be members of the Society, would gladly, in their own interests, make a sacrifice to provide the money which is necessary for the purpose he had indicated. He moved the amendment he mentioned.

The President suggested that the amendment should be submitted as a special resolution.

Mr. GLYN-JONES: You could have ruled me out of order if I had proposed this as a resolution without having given notice of it. If you will give me permission, and the meeting will do likewise, to propose this as a resolution I shall be glad. I want the Council and the whole body of chemists to be behind it. Continuing, the speaker expressed the hope that members who had even a nodding acquaintance with members of the House of Lords would give their names to the Secretary, in order that the Bill should be opposed.

Mr. CAMPKIN said Mr. Glyn-Jones had rendered the Society a good service in bringing the resolution before the meeting. He appealed to the meeting, and through it to chemists generally, to do something for themselves and to assist the Council more than they had hitherto done. The difficulty of the Council throughout had been to get the ear of the House with regard to the injustice from which chemists suffer. If every chemist would do his utmost to communicate with, and if necessary educate, members of Parliament, matters would be more easy. They are indebted to the President for the action he had taken in regard to the Joint Committee, and to Mr. Idris and Mr. Winfrey for the assistance they had rendered.

Mr. GILMOUR, in referring to the new by-laws relating to Preliminary examinations, entirely dissociated himself from the views expounded by Mr. Mackenzie. ("Hear, hear," and applause.) It is simply impossible, he said, to go back to the old form of Preliminary in any form whatever. Nothing could be gained by any agitation for the lowering of the standard, although something might be done to make the standard more adaptable than at present. Commenting upon the Chairman's remark that the membership of the North British Branch has increased by two, Mr. Gilmour remarked that the view taken in Scotland is that the Pharmaceutical Society as a body is one and indivisible. There is nothing of caste or creed about it. The question is not whether the North British Branch pays its way or not, the question is how best they can promote the good name and the efficiency of the Society. (Applause.) At the same time he desired to make it clear that the Scottish establishment yielded a very good profit—not less than 400%.

Mr. KNIGHT spoke approvingly of Mr. Glyn-Jones's suggestion. It was, he said, quite refreshing to hear that something is to be done to oppose the Poisons and Pharmacy Bill. He also asked if a chemist is obliged to produce his poison-book when asked to do so by the police.

The President, in reply, said the police cannot compel a chemist to show his poison-book, but by issuing a subpoena can get him to produce it in court. It is always well to avoid any trouble by giving reasonable facilities to the police, who are working in the interests of justice. In regard to the silence of the Council at the annual meeting, the complaint used to be the other way, until it became an unwritten law that the annual meeting was to be for the benefit of the ordinary members. "This," said the Chairman, "is your day out, gentlemen, and some of you have taken full advantage of it." (Laughter.) He hoped that Mr. Pentney, having referred on more than one occasion to the Secretary's salary, would avoid doing so at future meetings. He (the Chairman) had no sympathy with any steps that might be taken to lower the standard of education. Could they conceive it as being likely to tend to the dignity of their calling to accept a standard of education which is not good enough for the dentist, accountant, architect, or surgeon? It would be a huge mistake to do anything of the kind. With reference to the question of apprentices, there are hundreds of boys who could pass the Preliminary examinations, but who have not the inducements to enter pharmacy. Replying to questions which had arisen respecting the "Codex," the Chairman said that this had paid for itself, and it would not be long before they would find it a source of income. (Hear, hear.) The whole arrangement had been managed by a committee, there had been no editor appointed, and nobody had been paid anything for the work done in the compilation.

The report and balance-sheet was then adopted.

#### THE PARLIAMENTARY FUND.

Mr. GLYN-JONES then formally proposed:

That this meeting asks the Council to take into consideration the immediate establishment of a Parliamentary Fund to contest the proposed pharmaceutical legislation hostile to the legitimate interests of chemists and druggists, and which fund shall be under the absolute control of a committee to be appointed by the Council for that purpose.

Mr. J. F. TOCHER seconded.

Mr. BARRETT, in supporting the resolution, said it was necessary that a Defence Committee should be appointed at once to deal with the matter referred to, so that the Council should be relieved of some of its work.

Mr. R. FEATER CLARKE cordially supported the resolu-



tion, and said the Council was doing more in the matter than most of them knew of.

Mr. PENTNEY expressed his delight at hearing Mr. Glyn-Jones speak in his old fighting tones. That gentleman, he said, had made a grand call to the chemists of the country to see to their own interests. Mr. Idris, in his efforts, had not received the support he might have had from the chemists of the country.

The PRESIDENT said the Council is fully awake to the urgency of the matter, and already a special meeting of the Council has been arranged.

Mr. BARRETT suggested that outside assistance should be obtained. Such men as Mr. Glyn-Jones would be very valuable to the Council.

The PRESIDENT said Mr. Glyn-Jones is already in close consultation with the Council.

The resolution was then put and carried unanimously.

Mr. GLYN-JONES said perhaps members would intimate after the meeting what sums of money they desired to contribute to the fund.

Mr. MACKENZIE suggested waiting to see what sort of a nest-egg the councillors would give.

Scrutineers for counting the voting-papers were then appointed, the SECRETARY stating that the scrutineers would meet at eleven on the morrow instead of ten.

The PRESIDENT then, in accordance with the by-laws, called attention to the registers, which, he said, were open for inspection.

The auditors were then re-elected.

The SECRETARY then read a letter he had received from a Divisional Secretary suggesting an alteration in the time of holding the annual meeting, and stating that Wednesday or Thursday would be more convenient for the evening meetings than Tuesday.

The PRESIDENT said the matter would be considered by the Council, and

Mr. MACKENZIE said that to hold the meeting later in the day would be inconvenient to those who come from a distance.

On the motion of Mr. BARRETT, seconded by Mr. PENTNEY, a vote of thanks was accorded to the President, and the meeting adjourned.

#### COUNCIL-MEETING.

At an informal meeting of the Council held after the annual meeting, the resolution relating to a Parliamentary Fund was discussed, and it was decided to recommend that the Parliamentary Fund suggested should be established. It was considered, however, that the fund should be placed at the disposal of the President, to be used at his discretion. A Lobbying Committee is already in existence, and it is suggested that additions might be made to that committee with the object of including members of the pharmaceutical calling who would be willing to co-operate with the Council in Parliamentary work. Those who desire to contribute to the proposed fund may, in the meantime, send their names and promises of their co-operation to the President at 17 Bloomsbury Square.

### The Week's Poisonings.

NINE deaths by poisoning were reported during the past week, five being misadventures. Henry Prosser (58), of Woodseats, Sheffield, and Louisa Rackett (28), of Bradford, each took salt of lemon—in mistake for whisky in the one case, and for Epsom salts in the other.—James Coleman (55), of Islington, who had been an invalid for some time, drank some liniment of belladonna in mistake for a medicine for internal use.—A Jarrow labourer named Albert George Burton (44) died from taking an overdose of morphia for insomnia.—Arthur C. Taylor, manager for Messrs. Edge, chemists, 111 Soho Road, Handsworth, was discovered dead in bed, with several bottles that had contained poison on the table.—Lizzie Grant (17) was found dead in her room at Baigie Inn, Bridge-of-Earn, and death was found to be due to poisoning by carbolic acid, which, it is surmised, she took inadvertently.—Two suicides with potassium cyanide have occurred: one at Chiswick, where it was taken by William Baumgartner,

and the other at Portsea, where Henry Jefferies (44), a tailor, took a solution of the cyanide after a drinking bout.—An adjourned inquest on the body of Ida Grace Miller (20), a Hampstead domestic servant, was held at Hampstead on May 18, when it was stated that deceased became seriously ill in March and had obtained drugs. Her condition became grave, and she was removed to the Hampstead Infirmary, where she died. The inquiry was adjourned in order that deceased's employer might be called to give evidence, but in the meantime he shot himself dead at Edgware. The medical evidence showed that death was due to the effects of having taken drugs for an illegal purpose, and an open verdict was returned.

### College Notes.

VISITING CHEMICAL-WORKS.—On May 18 the technological students of the Manchester University, under the guidance of Dr. G. A. Bailey, ex-chairman of the Manchester Section of the Society of Chemical Industry, visited the chemical-works of Messrs. John Riley & Son, of Hapton. The students were shown the manufacture of sulphuric acid, alkali, chlorine, and the recovery of sulphur from alkali waste. Messrs. Riley met the students, and the chemists at the works conducted them over the works.

SOUTH OF ENGLAND COLLEGE OF PHARMACY.—Under the guidance of the principal the students held an enjoyable botanical ramble on Tuesday, May 19, over Coulsdon Common. Tea was given by the principal at the Fox and Hounds, Purley, and a short and enthusiastic concert was held afterwards. The students continued the ramble through Farthing Down to Stoats Nest. About fifty different species of plants were recognised. A hearty vote of thanks was accorded to Mr. Lucas.

MANCHESTER COLLEGE OF PHARMACY.—The students of this College, under the direction of Mr. Charles Turner, the principal, visited the warehouses and laboratories of Messrs. Evans Sons Lescher & Webb, Ltd., Liverpool, last week. The preparation of volatile oils in the large distilling plant which is always in operation created much interest. In the analytical laboratories the fractional distillation and polarimetric examination of sandalwood oil and the testing of balsam of peru and beeswax indicated to the student how the purity of drugs is checked. In the manufacturing laboratories the drying and grinding of drugs, the processes of maceration and percolation, and the evaporation of large quantities of liquids to form extracts were explained and discussed. Mr. John K. Evans piloted the party through the warehouses, and Mr. Hornblower did the same in the works.

THE "KENNEL NEWS" of May 8 gives striking testimony to the efficacy of aphrodine (for which Messrs. Chas. Zimmermann & Co. are agents) in the breeding of dogs and the production of eggs from prize hens.

BOMBAY NOTES.—Mr. C. A. Pinckney, chemist and druggist, of the Army and Navy Stores, has returned to Bombay after a lengthy period of absence.—Mr. D. A. Young, chemist and druggist, left Bombay on April 30 for Home on the Austrian-Lloyd mail steamer.—Mr. C. B. Robinson, F.R.G.S. (Thomson & Taylor, wholesale and retail chemists), presided at the annual general meeting of the Bombay Presidency Trades' Association last month.

SALT MANUFACTURE AND REFINING.—Experiments with a new process of salt manufacture and refining were made at Sutton, St. Helens, on May 18. The process is that of Mr. T. H. Tee, of Seaforth, and by it the old system of evaporation is dispensed with, the rock salt in its natural, impure, and discoloured state being tipped into an open hearth furnace, where it becomes quickly molten. It is then drawn off into converters or moulds. Compressed air is then forced into it, and in a few moments all impurities are precipitated. The time occupied in the process is a little over an hour, and when cool the salt is ground and packed for the various markets. In recent experiments about 35 cwt. of rock salt were put into the furnace and heated at from 1,600 to 1,800 Fahr. After the compressed air had been passed through it, 80 per cent. of pure salt was produced, the remaining 20 per cent. being the impurities. It is computed that with the consumption of one ton of slack coal 15 tons of pure white salt are obtained, while under the evaporation process one ton of coal produced only two tons of salt. The salt produced by the Tee process being of fine crystals is absolutely free from moisture and is slow in absorbing atmospheric moisture. The cost of production is under 5s. per ton.



## Observations and Reflections.

By XRAYSER.

### Quackery in London in the Seventeenth Century

is illustrated by a collection of advertisements in two volumes which may be found in the British Museum Library by any one interested. One of the volumes is dated "1660, &c.," the other "1675, &c." No explanation or comment, nor even definite dates are given in either of the volumes; only some hundreds of handbills such as were then distributed in the streets, and a few cuttings from unnamed journals. Such evidence as there is indicates that most of these bills were issued in the reign of William and Mary. They are not badly printed as a rule, but the paper is poor and the grammar is not always Addisonian. But any such defects may be overlooked in view of the generosity of the promises held out, and the glowing testimony which each author bears to his own skill and learning. The advertisers almost invariably announce that they have learnt their secrets, or acquired their skill, "by the Blessing of God," and it seems to have been popular to have studied

### In Foreign Lands,

or to profess to have done so. "These are to give notice that here is lately arrived an experienced and most famous High German Doctor who by his Great Study," and so forth. This gentleman had testimonials "not only from Emperors, Kings, Dukes, and Electoral Princes, but also from the Lord Mayor of London and the Court of Aldermen"; a subtle tickling of the vanity of the citizens. He was then "for the public good settled in the Strand betwixt St. Clement's Church and Temple Bar, at the sign of the Angel," and his office might be recognised by "pictures of patients and manual operations over the door, and a red cloth with stones and ruptures taken out of patients." Another, Cornelius a Tilbour, was a Dutchman, had been sworn Chirurgeon to the late King Charles II., and was now "privileged by our Gracious Sovereign Lord and Lady King William and Queen Mary." He had "cured Thousands of People in London of dangerous maladies and distempers who are now living Monuments of the Blessings of Almighty God by the incomparable virtue of my excellent and never-failing remedies, the principal of which is my Orvietan in liquid or powder. This was that famous medicine that expelled that vast quantity of poison before King Charles II., for which I received a gold medal and chain from that bounteous Prince." He was to be found in lodgings at Mr. Berryman's, grocer, Bishopsgate Street. Salvator Winter states that he was a Neapolitan, ninety-eight years of age, "yet by the Blessing of God as strong as anyone of fifty, which first he attributes to God, and then to his Elixir Vitae, which he always carries in his pocket a days, and under his pillow at nights, and whenever he finds himself distempered he taketh a spoonful or two as need requireth." The Elixir, he states, was composed of sixty-two ingredients, one correcting the other. Sir Kenelm Digby had highly recommended it. Old Salvator died a year later, for there is a bill from his son of the same name who says he continues to make the Elixir which kept his father alive to ninety-nine years; but Salvator junior was then living opposite to his father's old house in Drury Lane, "for some ignorant persons were now living in that house, the better to countenance their deceits," and were selling a counterfeit Elixir Vitae.

### Among Ladies Handbills

I am attracted by one issued by "Mrs. Elizabeth Russell, that was Dr. Jones's

widow, at the Two Blew Pots against Gray's Inn in Holborn." She has pills made from a tincture of the Sun, having dominion from the same light, and giving relief and comfort to all mankind. "They cause all complexions to laugh and smile in the very time of taking them." They work in the following ways in the order named: (1) Sleep, (2) sweat, (3) wind downwards, (4) stool, (5) urine, (6) by clearing the spirits, (7) by strengthening the whole body. "Twenty pills in a box, 1s. Take all the twenty at once, last thing going to bed, and wash them down with anything." Perhaps it was the washing down that made the complexions smile. A French cosmetic specially recommended to ladies by another advertiser was the Princesses' Powder, "so-called because four princesses whose beauty is so much talked of in Europe are served with it with so great success that they have preserved their beauty with an air of youth till Seventy years of age. Madame de Montespan, with whom the King of France was so much in love, uses it. Naturally she had not a fine or delicate skin." Madame would have had this quack horsewhipped if he had published that libel in Paris.

### Qualified Quacks,

or persons declaring themselves to be qualified, are numerous enough in this collection. One, who states he is a graduate physician and lives in Great Knight Rider Street (a blew ball over the door), has a pill far beyond any medicament yet known for the French disease, and offers it at 1s. 6d., 2s. 6d., and 5s. a box, money to be returned if it does not cure. This benefactor does not give his name and "should wholly omit to appear in print only in opposition to the Ignorant that pretend to the cure of this disease. Upon this consideration alone I was persuaded to adventure the censure of some rather than conceal that which may be of so great use to many." In the same spirit another doctor says he offers his services, being much impressed by a saying of Plato to the effect that a man who does not distribute the gifts given him by God ought to be expelled out of society. J. Peachey, physician, announces that he has moved from Chequers Yard, Dowgate, to Queen Street, Cheapside, and may be advised with from 9 A.M. to 1 P.M. daily. "And because some ill men make it their business to fright the sick from physicians by telling them what unreasonable fees they demand," Mr. Peachey states that he will require no more than one shilling from anyone who comes to consult him. Further, for the benefit of persons who do not know him, he mentions that he drives a calash with one horse. He does not add what is the fee for stopping him in the street. Major John Choke, a licensed physician and one of his Majesty's Chymists, advertises Miraculous Necklaces for children breeding teeth "thereby preventing (by God's assistance) feavers, convulsions, ruptures, chincough, ricketts, and such attendant distempers." These are 5s. each. He names a number of titled people—the Countess of Northumberland, the Earl of Exeter, and others—whose children have used these necklaces. Dr. Charles Goodal, who gives his address at the Coach and Horses in Physicians' Colledge, Warwick Lane, offers for the public good a very superior sort of Jesuits' Bark, ready powdered and papered into doses with or without directions, at 4s. per ounce, or in quantity at 3l. per pound, and as evidence that this is a reasonable price he refers to Mr. Thain, druggist, of Newgate Street, to whom he had paid 9s. per pound for a considerable quantity. One would think it must have been Mr. Thain who was paying for the advertisement. Dr. Goodal adds that he may be consulted at St. Sepulchre's at prayers every day, but on the Lord's Day at 7 in the morning, and at home from 8 A.M. till 10 P.M.



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No. 1 Finest Pure FULLER'S EARTH (Light Colour)	15/cwt.	Finest Levigated "WHITE EARTH" (Toilet purposes)	18/cwt.
Finest Compound LIQUORICE POWDER	/8 & 1/1b.	Finest Pure TOILET OATMEAL, SPECIAL	32/cwt.
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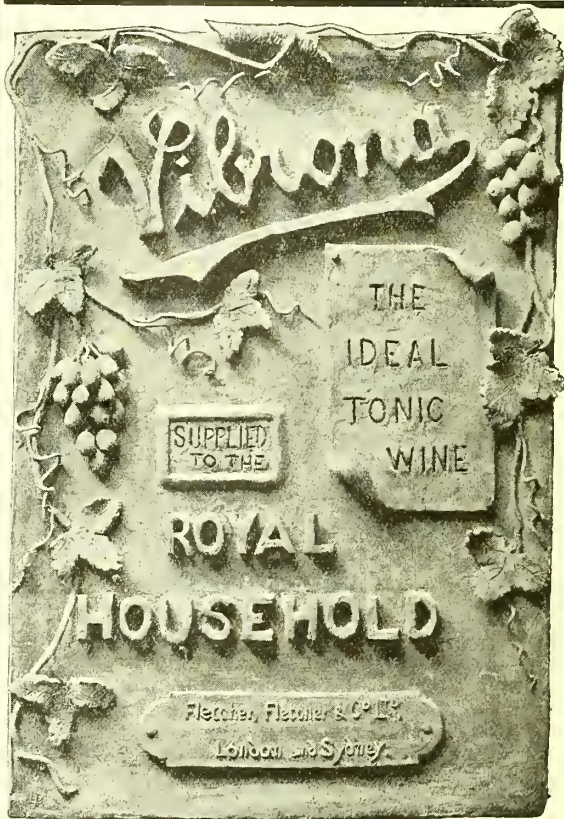
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"It was a Dream!"

WHEN the members of the Pharmaceutical Society and their friends were dining at the Hôtel Métropole on Tues-



day evening the President made a rather despondent speech in proposing the toast of "The Houses of Parliament." A little later Miss Annie Bartle sang Cowen's song "It was a Dream." There was, we understand, no ironic intention, but the song seemed appropriate to the effect of the recent pharmaceutical demonstration before the Joint Committee. The combined forces of Great Britain and Ireland have failed to bring about the so much desired revision of the Poisons and Pharmacy Bill, the Committee having this week decided that there should be no material alteration of the Bill, except to introduce Lord Ebury's Company Clause and one to extend the Bill to Ireland. "It was a dream" to suppose that the result would be otherwise; but last week there seemed to be a hope that the majority on the Committee were taking second thoughts on the subject, but that has proved to be erroneous. It may, however, be observed that Lord Ebury's clause (see p. 791) has been amended so as to make it accord with the exposure of certificate amendment of the shops management clause. The Irish Office has provided a clause extending the Bill to Ireland, which creates interesting controversial material for Irish pharmacists and druggists without harmonising the laws of the two countries. In fact, Mr. T. W. Russell (although he hails from Cupar, Fife) has in this matter followed the reputed Hibernian method of lengthening the blanket by sewing a piece of the top to the bottom. On the whole, chemists and druggists have to thank the Joint Committee for nothing.

We do not regard this condition of affairs as disastrous to chemists. No doubt, as Mr. Glyn-Jones urged at the Pharmaceutical Society's annual meeting on Wednesday, the position of affairs is one of the gravest urgency, and a dose of Celtic and pyrrhic eloquence is not inappropriate at present; but it appears to us that the majority of the Committee has played into the hands of the pharmaceutical party by wholesale rejection of the advice and amendments which they tendered. The conduct of the inquiry was in itself so directed towards a preconceived end as to furnish chemists with a splendid grievance to submit to their members of Parliament—this is advantage Number One. Admittedly the subject of the measure requires most careful consideration, for some amendment of the law is required in the interests of the public as well as in the interests of those engaged in the sale of scheduled poisons. This was not beyond the scope of the Committee's inquiry, as is proved by the fact that the official evidence called was entirely in that direction; while lay witnesses who have an intimate knowledge of the law and its practice gave information which was directed to show the imperfections of the Bill and how it could be made more applicable to existing conditions—indifference to this evidence is advantage Number Two. The third advantage to opponents of the Bill is its application to Ireland, as a result of which the Bill, in its present form, will create chaos in the pharmacy law of Ireland without affording any new advantage to the public. These are in themselves sufficient reasons for a hopeful view of the situation, provided the retail trade in Great Britain and Ireland uses its utmost endeavours to oppose the Bill in both Houses of Parliament.

We do not advocate a policy of obstruction, nor of destruction; but it is necessary that chemists should get their members of Parliament to put down the usual notice when the Bill reaches the House of Commons—"That the Bill be read this day six months." Such a notice will secure the requisite debate on the motion for the second reading, and will convince the Government that the Bill is one of

more importance to a section of the community than they appear to have been advised. Should it, after debate, be read a second time, some pronouncement should be demanded of the Government as to their intentions in regard to amendments when that stage is reached. That the Bill should pass in its present form is unthinkable; but strange things happen in Parliament when those interested are not on the alert, or when they do nothing because they think that those in authority will do everything. Such a condition of inaction is at the present time as serious to the retail drug-trade of Great Britain and Ireland as an adverse report by the Joint Committee, and should be particularly avoided.

## A Customs and Excise Change.

MR. ASQUITH in his Budget speech made the following significant remark:

I propose to take power to transfer the Excise Department from the Inland Revenue to the Customs. From the point of view of administrative economy and efficiency I think a substantial gain will result to the public service from the change.

This is a sweeping announcement, and the change referred to will affect the drug-trade, especially those holding liquor licences and others exporting tinctures on drawback. Complaint has been made of the present dual system of revenue control, and it has long been condemned by practical business men; but it is curious that this duality will reappear in the drug-trade by the fact that the Customs in future will control the patent-medicine and various liquor licences, while the Inland Revenue Board will still be answerable for the medicine stamp-duty. The proposal is to merely cut out the Excise branch and leave the stamp and taxes to the Inland Revenue. Seeing that the object of the forthcoming administrative change is efficiency, it is quite possible for the medicine stamp-duty to become a Customs one in order to avoid duality. The question may be somewhat of an academic one, for continuity of policy would be ensured—at least for a time—by the permanent staff continuing to deal with accustomed matters. It is the experience in spirit, tobacco, and sugar trades that when one department charges the duty and another imposes the licence, the interests of the shopkeeper, merchant, broker, and importer have suffered by the delay, friction, and confusion that have too often arisen. Traders' applications have been shuttlecocked between the Custom-house and the Strand; different policies have swayed different sets of revenue officials, with the result that different practices have prevailed and given rise to trade inequality. In many parts of the United Kingdom there are two separate sets of buildings, accounts, staff, methods, and treatment of traders. All this should be done away with by Mr. Asquith's proposal. Exporters of spirituous preparations should be benefited by the change. It is fairly well known that greater latitude exists in the Customs Department in their methods of control than that existing in the Excise. It is not suggested that the Customs are lax in their duties, but there is not that official hair-splitting exactitude in this Department that exists in the other. It is not inconceivable that the tincture exporter will under the new régime be allowed to work on duty-free spirit in a special room of his factory, and thus avoid the payment of surtax and the irritating details involved in claiming drawback. There are bonded warehouses under the jurisdiction of the Customs where essences and perfumes are manufactured for export, and there can hardly be a doubt that as this export trade increases the Customs will grant every reasonable facility in order to extend this

trade and save manufacturing chemists the outlay of duty necessitated under present conditions. Mr. Guillemard, the new Chairman of the Board of Customs, has been promoted from the Inland Revenue Board to fill a post which at the present juncture will mark an epoch in the history of the Department. The step taken by Mr. Asquith is intended to improve the conditions and give greater facilities to the commercial community. Whether he sees it or not, the Customs Department is likely to play a most important part in the future, and, diametrically opposite to the intention of Mr. Gladstone, the present Premier aggrandises the importance of the Custom-house at the expense of that of the Inland Revenue Board. But he seems to have weighed up the question very carefully, and as far as chemists are concerned the control of their licences, use of methylated spirit, and exportation on drawback will fall to the Board of Customs. The details of the proposed change are not yet available; but these observations will serve to prepare our readers in the manufacturing, retail, and wholesale departments of the chemical and drug trades for the advent of the new broom.

## Purity of Pharmaceutical Chemicals.

ACADEMIC discussions have occurred from time to time in regard to the desirability of authoritative limits of impurity being fixed for pharmaceutical chemicals. These have chiefly been with reference to pharmacopœial standards, and the relation of such standards to the incidence of the Sale of Food and Drugs Acts has usually been considered. The outcome hitherto has been a continuance of the notion that actual limits of impurity as authoritative standards would do more harm than good to retail chemists and others concerned. More recently there has been a distinct advance from this nebulous position. The British Pharmacopœia authorities have acted in a manner which indicates intention to fix limits where possible, and the Local Government Board has issued a statement regarding the maximum limits of lead and arsenic in three chemicals which have all the effect of authoritative standards. General extension of the principle of limitation of impurity in chemicals seems, therefore, inevitable, and the chief factor of uncertainty now is, What will the limits be and who will provide them? To this, in the present issue, we have an excellent response by Mr. Chas. A. Hill, who, as analyst, pharmacist, and chemical manufacturer, discusses the subject in an exhaustive and cogent manner. We call attention to his communication in order that the subject may be discussed in the new phase upon which it has entered. The question as Mr. Hill presents it interests pharmacists and manufacturing chemists on both sides of the Atlantic. As to America, it interests those in the United States who have to conform, under the Federal Food and Drugs Act, to the requirements of the United States Pharmacopœia. The "limit-tests" of that work are, according to Mr. Hill, "unscientific and unsatisfactory"; but it should be noted that this refers to the manner of applying the tests, and not directly to the limits of impurity. In Canada the British Pharmacopœia has official authority, so that the subject equally interests Canadian manufacturers and pharmacists. In the United Kingdom several interests are affected. Chemical manufacturers have experienced, and are continuing to experience, difficulty in conforming to conditions which are impossible under the British Pharmacopœia method of expression, and are shifty when we get outside that work.

Experience in this country justifies the opinion that our chemical manufacturers can eliminate impurities when a standard is fixed. A notable example of this is the improvement in the quality of citric and tartaric compounds. Manufacturers are not averse to working to a standard, and Mr. Hill's phrase "best obtainable" fairly expresses what is wanted. The same consideration applies to wholesalers and retailers, but they have to reckon more directly with the probable influence of the law as applied generally to chemicals produced for a specific purpose—*i.e.* medicinal or pharmaceutical, terms which are probably not equivalent. We are not disposed at this stage, however, to treat this part of the subject as one bristling with insurmountable difficulties. The immediate necessity is to get out of the slough of uncertainty about the impurities of pharmaceutical chemicals, and Mr. Hill's communication presents a broad basis for discussion of the subject by all who are interested therein.

## Patent Medicines in Australia.

It is not now expected that any progress will be made with the Australian Government's proposals *re* disclosure of the composition of proprietary medicines during the present Session of Parliament (see p. 776). The Proprietary Articles-Sub-section of the Chemical Section of the London Chamber of Commerce met on Wednesday afternoon, under the presidency of Mr. John C. Umney, when satisfaction was expressed with the work done by Messrs. Kenningham and Glover, who are prolonging their stay in Australia by a few weeks. They appear to have accomplished all that can usefully be done at present.

## Selected Formulas.

The Aberdeen Pharmaceutical Association has published this week as a twenty-five-page booklet, bound in cloth, a selection of forty-five formulæ from the "British Pharmaceutical Codex," but, curiously, most of the items selected are not original to the "Codex," so that it is incorrect to say that they "are the outcome of the combined investigations" of the gentlemen named. The following is given as an improved formula for liquor sodii carbolatis of the "Codex":

### PHENOL SODIQUE.

(Syn. *Solution of Sodium Phenate.*)

Carbolic acid	...	...	3.125
Sodium hydroxide	...	...	0.34
Triple orange-flower water	...	...	25.00
Triple rose-water	...	...	12.50
Glycerin	...	...	12.50
*Solution of eudbear	...	...	12.50
Distilled water to produce	...	...	100.00

Mix.

This solution is used as an antiseptic mouth-wash after tooth-extraction and in dental caries, 1 fl. dr. being added to a wineglassful of water.

*Cudbear	...	...	3.75
Distilled water to produce	...	...	100.00

Boil for ten minutes and make up to the required volume.

Chemists who desire copies of the booklet can obtain them from Mr. William Reid, 100 Holburn Street, Aberdeen (Secretary of the Association), price 1s. each.

## Hyoscyamus Muticus.

Mr. Edwin Dowdard, of Messrs. Parke, Davis & Co.'s analytical staff at Detroit, reports ("Amer. Journ. of Pharm.," May 1908, p. 202) that a quantity of henbane appeared on the American market which contained a large amount of alkaloid. The various parts yielded the following amounts: Whole drug, 0.75 per cent.; root, 0.83 per cent.; stem, 0.48 per cent.; leaf, 1.34 per cent.; and seed, 1.17 per cent. The plant was identified as *Hyoscyamus muticus*. The alkaloid isolated had a melting-point of



107° C. and a specific rotatory power of  $-20.4^\circ$ , which show that the alkaloid is practically pure hyoscyamine. The original paper contains full analytical data, which it is unnecessary to repeat here, the important point being that Egyptian henbane now appears to be a commercial commodity.

## Westminster Wisdom.

(From our Parliamentary Representative.)

### MERCHANDISE-MARKS BILL.

The second reading of this Bill was down for May 18. Six blocking motions are on the paper, these being by Messrs. Mooney, Hayden, W. Redmond, McKillop, P. O'Brien, and Devlin.

### FOODS AND DRUGS IN BELFAST.

In a printed reply to Mr. Devlin, the Chief Secretary for Ireland stated that twenty-five prosecutions under the Sale of Food and Drugs Acts took place in Belfast during the first quarter of the present year, convictions resulting in all cases. There are two inspectors under the Food and Drugs Acts in Belfast.

### POISONS AND PHARMACY BILL.

THE Joint Committee of the Houses of Lords and Commons met, as appointed, on Tuesday morning at twelve o'clock, and Mr. W. S. Glyn-Jones was called in, when Lord Haversham (the Chairman) informed him that the Committee had received his very full statement regarding the Poisons Schedule attached to the Bill. The Committee felt that they could not go into the merits of this question, because it is one for experts, and they understood that the Schedule to the Bill had been provided by the Departmental Committee, although since then it had been revised by the responsible officers of the Privy Council. Under these circumstances the Committee felt that they, not being experts in this subject, could not decide upon the matters raised in Mr. Glyn-Jones's statement, and they had therefore come to the conclusion that the statement should be referred to the Privy Council as one which required the consideration of those more intimately acquainted with the subject than the members of the Committee. After this statement the proceedings were conducted *in camera*, when Sir John Batty Tuke and Mr. Idris submitted a series of amendments with a view to improving the Bill and especially for removing its most objectionable parts; but the majority of the Committee were averse to any material alteration of the measure, considering that that is a matter which more appertains to the Houses of Lords and Commons. They completed their labours at a sitting on Wednesday afternoon, and the same evening a report, with the proceedings of the Committee, was made to the House of Lords, who ordered the proceedings to be printed. The Bill as reported with amendments was committed to a Committee of the whole House, and to be printed as amended. In the House of Commons a similar report was brought up, and ordered to lie on the table and to be printed. The following statement shows how the Bill stands as amended by the Committee:

Clause I.—Repealing Schedule A [poisons] of the 1868 Act. No alteration.

Clause 2.—Providing for the sale of agricultural and horticultural poisons by licensed vendors. No alteration.

Clause 3.—Dealing with the management of chemists' shops is altered by the additions of the wording in italics, as under:

(1) Any person who, being a duly registered pharmaceutical chemist or chemist and druggist, carries on the business of pharmaceutical chemist or chemist and druggist shall, unless in every premises where the business is carried on the business is *bonâ-fide* conducted by himself or some other duly registered pharmaceutical chemist or chemist and druggist, as the case may be, and unless the name and *certificate of qualification* of the person by whom the business is so conducted in any premises is conspicuously exhibited in the premises, be guilty of an offence under Section 15 of the Pharmacy Act, 1868.

(2) The provisions of Section 16 of the Pharmacy Act, 1868, which enable the executor, administrator, or trustee of

the estate of a deceased pharmaceutical chemist or chemist and druggist to continue his business so long as such business is *bonâ-fide* conducted by a duly qualified assistant shall be construed as enabling such executor, administrator, or trustee to carry on the business if and so long only as in every premises where the business is carried on, the business is *bonâ-fide* conducted by a duly registered pharmaceutical chemist or chemist and druggist, as the case may be, and the name and *certificate of qualification* of the person by whom the business is so conducted in any premises is conspicuously exhibited in the premises.

(3) *A body corporate [or in Scotland a firm or co-partnership] may carry on the business of a pharmaceutical chemist or chemist and druggist, and may use the description of chemist and druggist, or of chemist or of druggist if in every premises where the business is carried on the business is bonâ-fide conducted by a manager or assistant being a duly registered pharmaceutical chemist or chemist and druggist, as the case may be, and if the name [and certificate of qualification] of the person so qualified is conspicuously exhibited in the shop or other place in which he so conducts the business; subject as aforesaid, sections one and fifteen of the Pharmacy Act, 1868, shall apply to a body corporate in like manner as they apply to an individual.*

Clause 4.—Extending the powers of the Pharmaceutical Society to make by-laws respecting the preliminary practical training of candidates for the qualifying examination, and division of that examination. No alteration.

Clause 5.—Restricting the conditions for the sale of mineral acids. No alteration.

Clause 6.—Short title, commencement of the Act, and barring its extension to Ireland modified by removal of the bar, and insertion of the following clause proposed by the Irish Office and handed in by Mr. T. W. Russell:

*This Act shall apply to Ireland, subject to the following modifications:*

(A) *For reference to the Pharmacy Acts, 1852 and 1866; or either of them, there shall be substituted references to the Poisons (Ireland) Act, 1870, the Pharmacy Act (Ireland), 1875, and the Pharmacy Act (Ireland), 1875, Amendment Act, 1890, and for references to particular provisions of the first-mentioned Acts shall be substituted references to the corresponding provisions of the last-mentioned Acts;*

(B) *For the reference to the Council of the Pharmaceutical Society there shall be substituted a reference to the Council of the Pharmaceutical Society of Ireland;*

(C) *For references to Orders in Council by his Majesty shall be substituted references to Orders in Council by the Lord Lieutenant;*

(D) *The expression "chemist and druggist" shall include "druggist" and "licentiate apothecary."*

The most important point is the introduction of the Company Clause (Sub-clause 3 of Clause 3). This is Lord Ebury's clause as finally amended in the House of Lords by the Earl of Crewe on the report stage two years ago. The Clause from the Irish Office purposes to simplify the application to Ireland of principles of the Bill which were drafted solely to amend the Acts of Great Britain. In accepting this clause, the Committee had before them for consideration the protests by the President and Vice-President of the Pharmaceutical Society of Ireland, as reported in THE CHEMIST AND DRUGGIST, May 16. We are informed that the peers on the committee were unanimous in the alterations as above indicated. It is expected that the progress of the Bill will now be rapid, and it may emerge from the House of Lords before the end of this month.

## WHERE TO STUDY.

THE following educational institutions are advertising in this issue:

South London School (Muter's), 325 Kennington Road, London, S.E.

London College of Chemistry, 323 Clapham Road, London, S.W.

South of England School, 186 Clapham Road, London, S.W.

North of England School, 55 Northumberland Street, Newcastle-on-Tyne.

Wills' Pharmaceutical College, 12 Boveney Road, Honor Oak Park, London, S.E.

Leeds College of Pharmacy, Clarendon Street, Leeds.

Liverpool School of Pharmacy, 18 Colquitt Street, Liverpool.

Bath and West of England College of Chemistry and Pharmacy, 6 Cleveland Place East, Bath.

Highbury New Park College, Highbury, N.

# The Purity of Pharmaceutical Chemicals,

With Suggestions for Commercially Obtainable Standards.

By CHARLES ALEXANDER HILL, B.Sc., F.I.C.

THE primary object of this communication is to set on record a summary of the results of the examination of a number of commercial samples of the more important official pharmaceutical chemicals, carried out for the most part during the past four years or so. The secondary object is to generalise from these results, and to suggest standards of purity which shall satisfy those conditions which are necessary in order that they shall be generally acceptable as commercial (drug-trade) standards, and possibly also as pharmacopoeial standards.

No excuse is needed for approaching the subject of standards for chemicals, for it is with us always. That the problem is not easy of solution may be gathered from the two facts that it has been many times broached, but never settled; one difficulty in the way of fixing definite limits of impurities in pharmaceutical chemicals being found in the various and conflicting nature of the considerations involved.

## DEFINITE LIMITS ARE DEMANDED.

Mr. J. C. Umney, in his important paper entitled "Standards for Medicines," read before the Pharmaceutical Society in November 1902, which dealt chiefly with drugs and galenical preparations, touched upon the subject of standards for chemicals, observing that a balance should be struck between regard for the public health and economy in manufacture; and in his paper entitled "Drug Standards," read before the West Ham and District Chemists' Association in May 1905, he expressed the view that some "guiding statements" might conveniently be included in the British Pharmacopoeia.

Mr. D. Lloyd Howard, speaking before the Pharmaceutical Society in December 1907 on the subject of chemical standards, urged upon that Society the necessity of greater definiteness in the standards of purity, and affirmed that the "highest practicable" standard of purity was the most desirable for inclusion in the Pharmacopoeia. Mr. T. D. Morson, another chemical manufacturer, is strongly in favour of official standard limits, and, in fact, I do not think it will be disputed that our present position of indefiniteness is vexatious and highly unsatisfactory.

What interpretation is to be put on such descriptions as "pure," "commercially pure," "yield no characteristic reaction with the tests for," "free from," "practically free from," "free from more than traces of," "giving only the slightest reaction for," and many other phrases which serve to show how words have been fenced with in order to express a conception which is at once real and indefinite? It may be remarked here, in passing, that the nauseating requirement that chemicals shall be "free from" or shall contain "only traces of" impurities can be much improved by the limitations involved if the word "objectionable" be added. The case is much improved if it is required that a chemical shall be "free from objectionable traces of" impurities, the word "objectionable" having a meaning corresponding to the use to which the chemical is to be put. This course, which leaves entirely open the question as to what in each case constitutes an objectionable trace, might be considered in case the Pharmacopoeia authorities decline to commit themselves to definite limits.

But what is a "trace"? This is a question which has often been asked, and has received many and different answers. What, particularly, is an "unobjectionable" or

"negligible" trace? For our present purposes the answer must be frequently, but not always, a physiological one. A trace of an impurity is not negligible in a pharmaceutical chemical if it is capable of producing an appreciable physiological effect, not omitting to bear in mind that such an effect may not be appreciable for some considerable time afterwards, and may depend upon the accumulative action of the impurity in question. But an impurity which is negligible from the physiological standpoint may, of course, be highly objectionable pharmaceutically, as an instance of which it is only necessary to mention the presence of small traces of iron in such substances as glycerin or potassium citrate.

It has been urged on behalf of the official requirement ("free from") that substances of a sufficiently high state of purity will not afford a characteristic reaction for the impurity in question unless an unduly stringent test is applied. In fact, the so-called "limit-tests" have been advocated, in which a fixed quantity of the substance in a solution of known strength is operated upon with a certain amount of standard test solution, etc. These tests, which have been introduced into the United States Pharmacopoeia, are not, in my opinion, to be recommended. They are unscientific and unsatisfactory, and, being of the nature of cookery recipes, have a tendency to come into the hands of and be abused by unskilled persons. Moreover, being quite inflexible in the light of advances in analytical chemistry, they are unsuitable for incorporation into a work which remains official for a considerable number of years. When opening a discussion at the Pharmaceutical Society in November last on the recently published "Codex," I had occasion to express my views on these two points, which may be said to be opposed to definite standards, and I may perhaps be allowed to quote the words I then made use of:

It is idle to say that if the tests are applied as they are intended to be applied no "appreciable" reaction will be obtained. To use so blunt a test, to manipulate so poorly, to observe so inexpertly, or to interpret so falsely as to obtain no "appreciable" reaction for an impurity, and thus to find the substance examined "free from" that impurity, is, to my mind, a device unworthy of modern scientific pharmacy.

It is not possible to devise a qualitative test for an impurity which shall be just so blunt as to pass all samples up to a certain limit of impurity and exclude all those containing a fraction more.

It need not be pointed out to those who have worked with or attempted to formulate such tests, that manipulation, conditions of light, etc., make all the difference.

If, therefore, any official standards of purity are set up, these must be stated as definite proportions of impurities permissible—parts per cent. or parts per million, as the case may be.

## AN OBJECTION ANSWERED.

It has been put forward as an objection to these definite limits that there may be a difficulty in deciding on the proportion present in any particular case—a disagreement between analysts. The answer is that in actual practice this difficulty seldom arises; and though, in the cases of arsenic and lead—probably the two most important impurities and most fruitful sources of dispute—it is true that one must reject to-day some of the earlier work on account of defective analytical methods, yet the analytical



chemistry of these impurities, even if it has not reached finality, may at all events be said to have reached a stage of development sufficiently high to render serious disputes quite unlikely in the future. And even if the allegation were true, what value is to be placed upon it? In the present state of things (official requirements undefined) we have first to decide the question of fact—*i.e.*, how much impurity is present—and then to face the more difficult and debatable question of opinion—*i.e.*, how little impurity *ought to be* present; the plea is merely that in each case the second question shall be answered once and for all, leaving only the question of fact open for decision. A further advantage is that the official monographs will, being independent of advances in analytical chemistry, always retain their utility.

#### "BEST OBTAINABLE."

Before discussing the factors which constitute acceptability in a "standard," let us first dispose of the contention that the standard should be that of the "best obtainable," for to my mind a very little reflection will serve to show that the "best obtainable" may not be good enough, and that we are not at liberty to adopt the proposal that this should form the basis of our standards.

Necessity is the mother of invention, while the history and experience of pharmaceutical chemicals, as with arsenical malt and smoke-emitting motor-omnibuses, have shown that certain conditions are only unavoidable until they are made illegal, or until they become sufficiently unpopular to be unprofitable, and then they are remedied. Competition from a more efficient and up-to-date manufacturing source may effect with chemicals what police supervision does with motor-omnibuses, so that what was "purest obtainable" yesterday would not be tolerated to-day, and this may even be the case irrespective of whether the less pure grade was really good enough or not. We need not go outside our own subject for a good example. On the occasion of the late Professor Warington's reading his now classical paper on lead in tartaric acid, Mr. E. J. Millard, in the course of the discussion, remarked that if a "lead-free" tartaric acid were produced at a price 10 per cent. or 20 per cent. above market price it would be accepted very freely indeed. What has happened? Tartaric acid to-day is readily obtainable in any quantity of a degree of purity which is admittedly sufficiently high, and it is safe to say that the price is not even fractionally higher on that account—this result having been brought about by greater efficiency in manufacturing processes.

#### REQUIREMENTS OF STANDARDS.

It will be convenient now to inquire what are the conditions which standards must satisfy in order to be completely satisfactory. Nor are these far to seek. Standard limits of impurity to be competent must be acceptable from two points of view—(1) physiological and (2) commercial. But these two considerations cannot be held to be of equal importance, so that the matter may be re-stated in this form: The primary condition to be satisfied is that a chemical shall be physiologically pure; having satisfied the first condition, the next condition is that it shall be the "best obtainable."

Having found the two conditions necessary for acceptability, we may next ask whether these two cannot be combined into one requirement. What is really the requirement that applies to all cases? Not that the chemical shall be "chemically pure," or even shall approach this ideal to any fixed extent, for this would involve the same actual percentage limits of impurities in all cases irrespective of their physiological actions or significance; not that the chemical shall be "physiologically pure," for this, while being most

difficult of determination owing to the lack of adequate data, and to difference of opinion among expert physiologists, would also admit large traces of physiologically innocuous impurities—as, for instance, sodium chloride in sodium bicarbonate; but surely the condition necessary of fulfilment is that the chemical shall be "pharmaceutically pure," or, as I have preferred to express it, "pure for pharmaceutical purposes," whatever those purposes may happen to be in any particular case. This expression has earned the approbation of so competent an authority as Mr. J. C. Umney, who, in his paper read before the West Ham and District Chemists' Association in May 1905, characterised it as "putting the case in a nutshell."

#### DISTINCTION BETWEEN PHARMACEUTICAL AND LEGAL STANDARDS.

Standards, having satisfied the necessary requirements, are liable to be set up as standards under the Sale of Food and Drugs Acts. For the latter purpose they should be the least strict which could safely be tolerated, whereas in order to serve as pharmacopœial standards something better than this is to be looked for. The standards which I shall propose in this communication are not intended to be Sale of Food and Drugs Acts standards—which may be the worst permissible—but are intended to serve as pharmacopœial standards of a fairly high degree of excellence. They may be useful as indicating what a discriminating buyer can depend on obtaining at a fair competitive price. The distinction which may be drawn between the functions of pharmacopœial and Sale of Food and Drugs Acts standards is exemplified in the case of lead in tartaric acid and cream of tartar. A limit of 0.002 per cent., or 20 parts per million, was arrived at some four years since as the outcome of a consultation between certain manufacturers, dealers, and analysts holding official appointments. Since then it has been made the basis of a certain class of commercial contracts, and has worked satisfactorily to the parties concerned. Last year it was adopted by Dr. MacFadden in his report to the Local Government Board of March 14, 1907, and thus received a certain official status. Yet 0.002 per cent. by no means corresponds with the "best obtainable" as defined above (*i.e.*, what a discriminating buyer can reckon on obtaining at a fair competitive price), and is therefore a Sale of Food and Drugs Acts as opposed to a pharmacopœial standard.

This fact, then, that the best obtainable is often considerably better than is really necessary, has to be reckoned with. It may be argued that it is unwise to interfere with a standard which has proved satisfactory; but should the Pharmacopœia give official status to such a proportion of lead as 20 parts per million, when the best cream of tartar, and that which a pharmaceutical chemist might be expected to keep in stock, contains not more than 5 parts per million? It seems a pity to water an attainable standard down to the permissible and lower limit.

#### OTHER CONSIDERATIONS.

Another consideration slightly different from the last, and which can hardly perhaps be described as a difficulty, but which shows that the selection of the figure for a standard is not so easy as might at first sight be supposed, may be best described by giving examples. Glycerin contains no lead. It might therefore seem obvious to put down the amount of lead allowable in glycerin as "none." But supposing a sample should contain 1 or even 2 parts per million of lead, should this sample be rejected for containing an undoubtedly unobjectionable quantity simply because the vast majority of samples do not con-

tain it? A similar case arises with lead in citric acid. This acid usually contains now only about 2 parts per million of lead, yet from the pharmaceutical point of view one could not well complain of a sample containing 5 parts per million.

A further matter to be considered in selecting standards which, as it is of a general nature, may be noted here, is that a chemical as met with in powder form may habitually contain a slightly higher proportion of metallic or other impurities than in crystal or lump form. As examples there may be mentioned borax, crystal and powder, as regards arsenic; ammonium carbonate, lump and powder, as regards lead. Now, it would seem anomalous to have different standards for the two forms of the same chemical, yet otherwise one must in the one event propose for the purer form a lower standard of purity than can be attained, or in the other vent a more severe limit for the less pure form than can be worked to consistently, unless, indeed, pressure be brought upon the manufacturers to raise their standard of purity here, and lack of sufficient cause may be the difficulty. Manufacturers, it is to be noted, except under stress of competition, will not raise the purity of their products without some inducement being offered or some amount of pressure being brought to bear, and there can be no pressure brought to bear upon them without sufficient cause, and no cause unless from either physiological or technical considerations. So that in order to be sure that the best obtainable is always used, a regular demand for it should be created by making it the official standard of purity.

In connection with this distinction which has been drawn between the pharmacopœial and Sale of Food and Drugs Acts standards it may be well to put forward the suggestion (which, if it received consideration at the hands of those whose business it is to administer these Acts, would further minimise the possibility of vexatious prosecutions) that prosecutions for the sale of a chemical by virtue of its containing an impurity of a poisonous character should only be taken under that section of the Act which charges the seller with selling an article injurious to health. It will be found on reflection, I hope, that this suggestion has a logical foundation. A substance may fail to be "of the nature, substance, and quality demanded" for a variety of reasons; but if a prosecution be undertaken in respect of a chemical found to contain what is alleged to be an objectionable amount of lead, arsenic, or other impurity which, in the circumstances, can have none other than a physiological significance, then it seems no more than fair that the prosecution should take upon itself the onus of proving at least that the unrestricted sale of the contaminated drug may in certain conceivable circumstances be injurious to health.

#### ARSENIC AND LEAD.

It is natural that the suggestion of standards of purity for the more important pharmaceutical chemicals should consist very largely in suggesting standard limits for lead and arsenic, the two most commonly occurring impurities. On the question of arsenic one recalls at once the "Report and Recommendations" made in 1904 to the General Medical Council by Professor Dunstan and Mr. Robinson. These authors devised a test which was intended to be of a certain degree of delicacy, and recommended limits; the latter, however, were based to some extent on their own standards for mineral acids, which were extremely severe—viz., 3 parts in ten millions. Moreover, the limits of impurity recommended were standards to which, in the opinion of these authors, official chemicals ought to attain,

whereas those suggested in the present communication are deduced from analyses of actual commercial samples—samples of chemicals such as any discriminating buyer can depend on obtaining at a fair competitive price—and are put forward as standards which shall be commercially attainable as well as sufficiently strict, and therefore on all hands acceptable. The analyses, too, it may be pointed out, have for the most part been made since the date of Professor Dunstan and Mr. Robinson's publication.

On the question of lead I may be permitted to refer to a paper published in this journal in March 1905, in which I dealt with the occurrence and estimation of this metal in pharmacopœial chemicals, but in that paper I expressly refrained from suggesting any standards. I refrained on general grounds, for the injudicious or promiscuous proposal of standards of purity is undesirable, and must lead either to the standards being ignored or, in the other event, to confusion. Moreover, "one-man" standards are not in general to be commended. Other considerations, however, have now arisen; and in putting forward the results of analyses of a large number of samples drawn from a wide variety of sources, and representative of commercial chemicals which are obtainable in the ordinary course of trade, it seems natural to utilise these results for the suggestion of standards. Nor does such a course appear to be open to the objection that improved methods of manufacture are likely soon to make the proposed limits out of date. For, with one or two exceptions (such as magnesia), both lead and arsenic may at the present time be said to have satisfactorily settled down, and this would appear to be particularly true in the case of citrates and tartrates.

It only remains, before passing on to the special portion of this paper, to mention briefly the analytical processes employed; but before doing so I should state that the work has been carried out in the analytical laboratory of Davy Hill & Hodgkinsons, Ltd., and that very valuable aid in conducting the analyses has been rendered by Mr. T. T. Cocking.

#### ANALYTICAL PROCESSES EMPLOYED.

The lead has been determined in nearly all cases by the colorimetric method proposed by the writer in the communication already mentioned, which preserves the accuracy of the Warington process while obviating the necessity of perfectly lead-free substances. It depends upon the experimental fact that while the trustworthiness of these colorimetric tests is dependent upon the comparison being made between two solutions of the same substance, it is independent of the concentration of those solutions within wide limits. It may be of service to repeat it briefly here.

Two solutions of the sample under examination are made, the one containing 2 grams and the other  $x+2$  grams. Each solution is filtered (if necessary), made alkaline with ammonia, and treated with 1 c.c. of a 10-per-cent. solution of potassium cyanide. The amount of lead which it is necessary to add to the solution of 2 grams of the substance in order to produce, upon the addition of sulphide, equality of coloration, is the amount present in  $x$  grams of the substance.  $x$  is any number which may be convenient in the particular case—it is usually 5 or 10.

For the determination of lead in magnesia and magnesium oxycarbonate, acetic acid is used for dissolving the sample.

Copper in tartaric acid was estimated colorimetrically by dissolving the sample in water and adding hydrogen sulphide water. The coloration produced is matched in a "dummy" solution containing copper-free tartaric acid,



the lead-content of which has already been brought to the same point as that of the sample under examination (this having been determined by a previous experiment). The copper was separated electrolytically and weighed in the case of the sample recorded as containing 28 parts per million. One hundred grams of the tartaric acid was dissolved in water, 50 c.c. of dilute sulphuric acid (13.65 per cent.) added, and the solution made up to 250 c.c. A current of about 0.5 ampère (giving a current density of about 2.5 ampères per square decimetre, counting both sides of the kathode) was passed for six hours, the solution being heated to about 80° or 90° C. Flag electrodes were used. The kathode showed an increase in weight of 2.8 to 3 milligrams.

A check experiment was made, in which copper was added to a solution of 100 grams of copper-free tartaric acid to the extent of 30 parts per million. The current density was nearly the same, and the increase in weight of the kathode was 3.2 milligrams.

The colorimetric method gave 28 parts per million for the same sample.

The arsenic determinations have been made with the simple apparatus described by the author and Mr. H. S. Collins in this journal of September 30, 1905. The hydrochloric acid used always contains 1 per cent. of stannous chloride solution.

### Commercial Chemicals.

**ACID. ACETIC. GLACIAL.**—Forty samples have been examined, each representing five carboys (50 gals.). Whereas formerly 1 or 2 parts per million of lead and traces of arsenic less than 1 part per million were usually found in this acid, during the last three years neither lead nor arsenic has been found in any sample except one, which contained 1 part per million of lead. In these circumstances it would seem right that the official standard should be "none" in the case of these two impurities.

**ACID. BORIC.**—About 200 samples have been examined, each representing 5 cwt.

**Lead.**—Previous to 1906 a few samples had to be rejected for not conforming to a limit of 20 parts per million, but during the past two years all the samples examined (about 120) have shown less than 10 parts per million, which figure is accordingly suggested as a fair limit.

**Arsenic.**—Although some parcels have had to be rejected on account of excessive traces of arsenic, the great majority of samples have shown from 1.5 to 5 parts per million, and there seems no reason for suggesting a higher limit than 5 parts per million.

**ACID. CITRIC.**—The results of the examination of 130 samples, each from a 5-cwt. cask, but representing very much more than this, show that a very high degree of purity has been reached in late years in the manufacture of citric acid, and the majority of samples of the best English makes of the present day contain 1 or 2 parts per million of lead (in some cases less than 1 part per million), while the samples of foreign manufactured acid have shown less than 5 parts per million.

In every case the proportion of arsenic has been less than 1 part per million.

The standards suggested are 5 parts per million for lead and 1 part per million for arsenic.

**ACID. HYDROCHLORIC.**—About 100 samples of the acid sold in commerce as "pure" (sp. gr. 1.16) have been examined, and the proportion of arsenic has, with the exception of a few samples (which were very impure), been from 0.2 to 8 parts per million, while during the past three years the variation has been only from 0.2 to 2 parts per million. Five parts per million is suggested as a sufficiently high standard of purity for a pharmaceutical acid, and as one which is commercially attainable. The action of the acid in dissolving arsenic from glass vessels has to be borne in mind.

The diluted acid of the B.P. prepared from a concentrated acid containing 5 parts per million will itself contain just less than  $\frac{1}{100}$  grain per pound.

The lead has not been determined in all the samples, but in those examined it has varied from 1 to 6 parts per million.

Ten parts per million is suggested as a standard.

**ACID. NITRIC.**—About fifty samples of the commercial "pure" acid (sp. gr. 1.42) have been examined. The lead has varied from 1 to 80 parts per million (w/v), and the arsenic from 0.2 to 3 parts per million (w/v).

Five parts per million (by weight) is suggested as a standard for arsenic, as with hydrochloric acid, but 20 parts per million (by weight) is suggested for lead, bearing in mind the property which this acid has of dissolving lead from glass.

**ACID. PHOSPHORIC.**—About sixty samples of the acid of sp. gr. 1.75 have been examined, each drawn from a 10-gal. carboy. The lead has varied from 5 to 18 parts per million w/v, equal to 3 to 10 parts per million by weight.

The arsenic has varied from 0.2 to 7.5 parts per million w/v, equal to 0.1 to 4.5 parts per million by weight, with the exception of one sample, which contained 6 parts per million by weight.

The standards suggested are 10 parts per million for lead and 5 parts per million for arsenic (by weight).

**ACID. SULPHURIC.**—In about sixty samples of the so-called "pure" acid the arsenic has varied from 0.2 to 20 parts per million (w/v), but in nearly all cases it has been less than 5 parts per million. In those samples in which the lead has been determined the proportion has varied from 2 to 200 parts per million (w/v).

The standards suggested are 20 parts per million for lead and 5 parts per million for arsenic (by weight).

**ACID. TARTARIC.**—The following results are drawn from the analyses of about 250 samples. Although each sample is drawn from a 5-cwt. cask, the total quantity represented by the samples examined would probably amount to several hundreds of tons.

**Lead.**—Of the samples of English acid examined 12 parts per million is the highest figure recorded for lead, the majority of samples showing from 2 to 8, and only very few exceeding 10.

In the samples of foreign manufactured acid the lead has varied from 4 to 28 parts per million.

**Arsenic.**—The English acid rarely contains as much as 1 part per million, and the same is true of the samples of foreign acid.

The standards proposed for these two impurities are 10 parts per million for lead and 1 part per million for arsenic.

**Copper.**—None of the samples of English acid has contained copper, but this metal has been found in seven samples of foreign acid, the proportion varying from 1 to 28 parts per million. If copper is present then the amount of this should, I think, be added to the amount of lead when sitting in judgment on a sample.

**Ash.**—The B.P. 1885 said "It leaves no residue, or only a mere trace, when burned with free access of air," a requirement which has given grounds for dispute as to the interpretation which should be placed upon it. The B.P. 1898 defined the proportion of ash, and also possibly the intentions of the compilers of the former edition, by fixing the limit at 0.05 per cent.

Of the samples of English acid about one-half have conformed to the present official limit of 0.05 per cent., and about half have yielded from 0.05 to 0.1 per cent., only very few exceeding by a slight amount the latter figure.

Samples of foreign acid, on the other hand, which are quite satisfactorily pure as regards lead and arsenic and in other ways, very frequently yield an excessive quantity of ash, chiefly calcium sulphate. Forty-four samples have contained quantities varying from 0.1 per cent. to 1.03 per cent. 0.1 per cent. is suggested as a limit for a future edition of the Pharmacopœia in place of the present figure, 0.05 per cent.

**AMMONIUM CARBONAS.**—The commercial article being liable to contamination with lead in considerable quantity, mention of this impurity should find a place in the monograph of the next Pharmacopœia.

A pure article is now obtainable which in lump form contains usually no lead, or less frequently 1 or 2 parts per million, while in powder form the quantity occurring is unobjectionable. During the past two years forty-six samples of the lump have varied from none to 2 parts per million, with an average of 0.6 part per million; while twenty samples of the powder have varied from 2 to 15 parts per million, with an average of 4.9 parts per million. These samples represent about 21 tons. Five parts per million is suggested as a standard for lead.

Arsenic has not been found in this chemical.

**AMMONIUM CHLORIDUM.**—Five parts of lead per million is commercially attainable, and is suggested as a standard; 2 parts per million for arsenic.

**AMMONIUM PHOSPHAS.**—Ten parts per million for lead, and 5 parts per million for arsenic, are suggested as standards.

**BISMUTH. CARBONAS.**—The arsenic has been found to vary from 0.8 to 3 parts per million. Two parts per million is suggested as a standard.

**BISMUTH. SUEINTRAS.**—The arsenic has been found to vary from 0.8 to 3 parts per million, as with the carbonate, and 2 parts per million is suggested as a standard.

I can confirm the previously published statements that the



proportion of bismuth oxide yielded on ignition is about 80 per cent., as against 77 per cent. calculated from the B.P. formula.

**BORAX.**—Lead does not appear to occur in borax, except to such an extent as 2 parts per million, this being the highest recorded figure for the past three years.

**Arsenic** is, of course, the difficulty, and it should be remembered that there are different commercial grades of purity. In some samples (which have, of course, been rejected) as much as 0.01 per cent. has been found. Of the 180 samples of the best grade which have been examined during the past two years or so, each drawn from a 5-cwt. cask, the arsenic has averaged 5 parts per million, with a variation of from 0.8 to 20 parts per million. Five parts per million is suggested as a standard, as with boric acid.

**CALCI CARBONAS.**—In precipitated chalk lead is usually either absent or only present to the extent of 1 or 2 parts per million, but in one sample it was found to the extent of 0.035 per cent. Arsenic has been found to the extent of from 1.6 to 3 parts per million. Standards suggested are 10 parts per million for lead and 5 parts per million for arsenic.

**FERRI SULPHAS EXSICCATUS.**—A standard of arsenic is desirable, and 2 parts per million is suggested. This is attainable.

**FERRUM REDACTUM.**—The older standards for arsenic in the case of this drug were put forward before the determination of arsenic in iron was understood as it is to-day. While fairly recently a parcel has been examined showing only 0.01 per cent., a more usual figure for the "best obtainable" is 0.015 per cent., 0.25 being the highest amount found at all recently. 0.02 per cent. appears to be a sufficiently stringent limit.

**GLYCERIN.**—About 450 samples have been examined, each being an actual sample from a 5-cwt. drum.

No lead has been found in any sample.

**Arsenic.**—This has varied from 0.04 to 5 parts per million. The very great majority of samples, however, have contained less than 2 parts per million, which is suggested as a standard for the next edition of the Pharmacopœia, although 4 parts per million—which is about the quantity detected by the present pharmacopœial "limit" test—may be considered by some to be a sufficiently low limit.

**Iron.**—Many samples give a slight darkening with sulphide, which is due to iron. When this is pronounced the trace may be objectionable from the point of view of the compounding pharmacist.

**LITHII CARBONAS.**—A limit of lead is required in this chemical since such a wide variation as from 2 to 210 parts per million has been found.

Ten parts per million is suggested as a standard for lead, and 2 parts per million for arsenic.

**LITHII CITRAS.**—Five parts per million of lead, and 1 part per million of arsenic, are suggested as standards.

**MAGNESIA AND MAGNESIUM CARBONATE.**—The omission of both lead and arsenic in the official monographs for the oxide and oxycarbonate of magnesium is really remarkable. Highly objectionable quantities of both impurities have been found, and though some manufacturers have considerably improved their products, quite recent analyses show that tests for these impurities should undoubtedly find a place in the next edition of the Pharmacopœia.

Three years ago I drew attention to the large traces of lead which occurred, and instanced a parcel of mag. carb. pond. from which I separated the lead and weighed it as sulphate, the quantity present amounting to 0.15 per cent., calculated as Pb. In a sample of calcined magnesia the lead was no less than 0.03 per cent.

By way of explanation of the comparatively high proportions of impurities which occur in these substances it may be worthy of mention that, assuming magnesium sulphate and sodium carbonate to be the materials utilised in the manufacture, and that each of these substances in crystalline form contains only 1 part per million of lead, then, by calculation, the proportion of lead in the resulting calcined magnesia will be no less than 13 parts per million.

This concentration of impurities may hold good as an explanation in those cases also where native minerals, such as dolomite and kieserite, are used as raw material—the use of impure mineral acids contributing to the contamination.

The highest and lowest quantities of lead and arsenic found in the four official chemicals are as follows (parts per million):

	Lead	Arsenic
Magnesia levis ... ..	4 to 30	1.6 to 8
" ponderosa ... ..	10 to 300	1.2 to 20
Magnesi carbonas levis ...	4 to 20	0.8 to 8
" ponderosus ... ..	2 to 150	0.4 to 10

From the manufacturers' point of view the limits of impurities should be about two and a half times as high in the oxide as in the oxycarbonate (the ratio of the molecular weights being 40:95), and from the commercial standpoint

the standards should be higher in the "heavy" than in the "light" varieties, judging by the quantities found; while from the pharmaceutical point of view the standards should be the same in each case, in accordance with the doses.

Having regard to the large dose—up to 60 grains—and to the fact that these substances are frequently administered to children, I do not consider that the proportions to be utilised as pharmacopœial standards should be higher than 20 parts per million for lead and 4 parts per million for arsenic; but it should be mentioned that many samples to-day will not pass this standard, and especially is this true of the "heavy" oxide. This case, I think, forms the only one in which I have considered it advisable to propose standards in accordance with which chemicals are not readily obtainable.

**POTASSII BICARBONAS.**—The lead has been found to vary from 2 to 6 and the arsenic from 0.4 to 0.8 part per million, and the standards proposed are 5 parts per million for lead and 1 part per million for arsenic.

**POTASSII CARBONAS.**—The presence of objectionable traces of arsenic in this substance has been noticed. It should be mentioned that there are of course several grades of purity.

Standards proposed: 5 parts per million for lead and 2 parts per million for arsenic are attained by the best grade, such as should be used in pharmacy.

**Chlorides.**—0.1 per cent., calculated as KCl, is suggested as a standard.

**POTASSII CHLORAS.**—Two to 30 parts per million of lead have been found, and from 0.2 to 3 parts per million of arsenic.

The standards suggested are 10 parts per million of lead and 2 parts per million of arsenic.

**POTASSII CITRAS.**—Five parts per million of lead, and 1 part per million of arsenic, are suggested as standards.

**POTASSII TARTRAS ACIDUS.**—The prosecutions which have taken place during recent years under the Sale of Food and Drugs Acts afford a striking example of the inconsistent manner in which these statutes have been administered; and it may not be out of place to recall a case—which was the subject of a leading article in this journal of January 19, 1907—in which a retail chemist was actually called upon to explain a sale of cream of tartar in which the public analyst had reported the presence of lead to the extent of  $\frac{1}{16}$  grain per pound, incidentally thereby proving that the sample was of a high degree of purity in this respect.

This unfortunate outcome of sensitive chemical tests rivals the astounding Aberdeen case—which formed the subject of an editorial article in this journal of August 9, 1902—where a chemist and druggist was fined for selling glycerin containing  $\frac{1}{16}$  grain of arsenic per pound.

Seeing that, as has already been stated, cream of tartar can be bought in which the proportion of lead present does not exceed 5 parts per million, there seems to be no reason for proposing a higher figure than this for a standard in the Pharmacopœia.

Arsenic occurs in the best grades of cream of tartar usually to the extent of less than 1 part per million, but sometimes it amounts to about 1.5 part per million. Two parts per million is suggested as a standard.

**SODA TARTARATA.**—The lead has been found to vary from 2 to 12 and the arsenic from 0.4 to 0.6 parts per million. The standards suggested are 10 parts per million of lead and 2 parts per million of arsenic.

**SODII BICARBONAS.**—In the great majority of samples examined the lead has varied from 0 to 2 parts per million, though 10 parts per million was found in one sample.

The arsenic has varied from 0.2 to 1.5 part per million.

Five parts per million of lead, and 2 parts per million of arsenic, are suggested as satisfactory standards.

**Chloride.**—The proportion of chloride present has been found to vary from 0.026 per cent. to 0.56 per cent. 0.1 per cent., calculated as NaCl, is suggested as a standard.

**SODII CARBONAS.**—One to 10 parts per million of lead have been found, the quantity present usually being 1 or 2 parts per million, while the proportion of arsenic found has been only from 0.2 to 0.6 part per million.

Ten parts per million of lead, and 2 parts per million of arsenic, are suggested as standards.

0.1 per cent. of chloride, calculated as NaCl, is suggested as a standard.

**SODII CHLORIDUM.**—Ten parts per million of lead, and 1 part per million of arsenic, are suggested as standards.

**SODII PHOSPHAS:**

**Lead.**—This has been found only in such proportions as from 1 to 3 parts per million.

**Arsenic.**—In the last three years this has been found in proportions varying from 0.4 to 150 parts per million.

Five parts per million is suggested as a reasonable and attainable standard for each of these impurities.

**SODII SULPHAS.**—Five parts per million of lead, and 2 parts per million of arsenic, are suggested as standards.



**SULPHUR.**—The official test for arsenic requires revision. About fifty samples have been examined for this impurity, and 2 parts per million is suggested as a standard both for the sublimed and the precipitated varieties.

#### ZINC OXIDUM:

*Lead* has been found in quantities varying from 0.06 to 0.32 per cent. 0.2 per cent. seems to be a fair standard.

*Arsenic* has been found in quantities varying from 0.4 to 8 parts per million, with two exceptional samples showing 0.1 per cent. Ten parts per million is suggested as a standard.

**ZINC SULPHAS.**—As a limit of chloride, calculated as  $ZnCl_2$ , 0.05 per cent. is suggested.

The standards suggested above are shown in the following table, the figures representing parts per million in every case:

	LEAD	ARSENIC
Acid. acetic. glacial. ....	None	None
Acid. boric. ....	10	5
Acid. citric. ....	5	1
Acid. hydrochloric. ....	10	5
Acid. nitric. ....	20	5
Acid. phosphoric. (1.75) ....	10	5
Acid. sulphuric. ....	20	5
Acid. tartaric. ....	10	1
Ammonii carbonas ....	5	None
Ammonii chloridum ....	5	2
Bismuth. carbonas ....	—	2
Bismuth. subnitras ....	—	2
Borax ....	5	5
Calcii carbonas ....	10	5
Ferri sulphas exsic. ....	—	2
Ferrum redactum ....	—	200
Glycerin ....	None	2
Lithii carbonas ....	10	2
Lithii citras ....	5	1
Magnesia levis ....	20	4
Magnesia ponderosa ....	20	4
Magnesi carbonas levis ....	20	4
Magnesi carbonas ponderosus ....	20	4
Potassii bicarbonas ....	5	1
Potassii carbonas ....	5	2
Potassii chloras ....	10	2
Potassii citras ....	5	1
Potassii tartaras acidus ....	5	2
Soda tartarata ....	10	2
Sodii bicarbonas ....	5	2
Sodii carbonas ....	10	2
Sodii chlorid. ....	10	1
Sodii phosphas ....	5	5
Sodii sulphas ....	5	2
Sulphur ....	—	2
Zinci oxid. ....	2,000	10

#### SIGNIFICANCE OF PROPOSED STANDARDS DEFINED.

In conclusion, I would again emphasise the fact that the standards proposed are not intended in all cases to be considered as limits of impurity to which rigid adherence is to be given, and beyond which action under the Sale of Food and Drugs Acts would be justified; and having made this clear, it will be well to specify what their significance is intended to be.

The proportions of impurities selected and (as far as regards lead and arsenic) tabulated above, are intended to form in each case a "standard" in the literal sense—a standard for the manufacturer to work to, a specification for the wholesale or retail dealer in his buying and in his analytical control, and a guide to the retail pharmacist as to what he may reckon on obtaining when buying from a reliable source at a fair competitive price—a specification, in short, for sellers and buyers generally. While, lastly, since they are also intended to afford useful information to the physician when writing prescriptions which he expects to be dispensed with chemicals of the highest grade of purity, it seems reasonable that the standards, if they meet with substantial agreement from other laboratories, should find a place in a future edition of the Pharmacopœia.

**COLLOIDAL PREPARATIONS OF NOBLE METALS.**—"The Hospital" (1908, 1129) states that the colloidal forms of silver, gold, platinum, and palladium possess a chemical activity comparable to that of the ferments and toxins. Silver appears to be the most active, and experiments with colloid preparations in local lesions and general infectious diseases (typhoid fever, pneumonia, etc.) appear to favour them as a valuable addition to materia medica.

## Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

**Verbenalin** is the name given by Bourdier ("Jour. Ph. et Ch.," 1908, 49) to a new glucoside,  $C_{17}H_{22}O_{10}$ , which he has isolated from the *Verbena officinalis*. It is crystalline, and melts at  $181.5^\circ$ , and in aqueous solution is  $[\alpha]_D^{20} = -180.5^\circ$ . It is not poisonous.

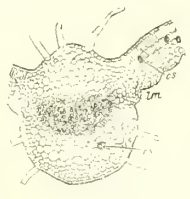
**Does Tellurium Contain Two Elements?**—With reference to this question (*C. & D.*, April 18, p. 602), H. Brereton Baker, F.R.S., gives a negative reply in the "Chemical News," May 1, p. 209. He attributes the anomaly observed by Bettel to be due to the presence of silver telluride, which has a lower surface-tension than pure silver.

**Ext. Rhamni Purshtani and Ext. Frangulæ.**—If black alder bark fluid extract be dried on the water-bath, rubbed on a small watchglass, covered with another, and warmed over a small flame, beautiful needle-shaped crystals, which often cross each other, sublime on the upper glass at  $140^\circ$  after a short time. Cascara-sagrada extract treated in the same manner does not form crystals, even after being heated for several hours.—*R. Rentsch* in "Pharm. Post."

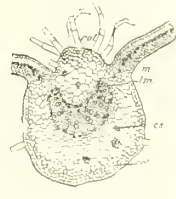
**Mercuric Glycophosphate**, which has not previously been prepared, has been obtained, according to G. Prunier ("Bulet. Commenc.,"), by mixing an acid solution of mercuric nitrate with a 50-per-cent. solution of sodium glycerophosphate. The mercuric glycerophosphate contains 54.29 per cent. of mercury and 8.21 per cent. of phosphorus. Mercurous glycerophosphate, obtained from a solution of mercurous nitrate, contains 70.07 per cent. of mercury and 5.4 per cent. of phosphorus.

**Marrubium.**—White horehound (*Marrubium vulgare*, L.) has been investigated by H. M. Gordin ("Jour. Am. Chem. Soc.," 1908, 265), especially with reference to marrubium, the bitter principle described by Mein. Gordin finds that the herb yields 0.25 per cent. of pure marrubium, melting at  $154.5^\circ$  to  $155^\circ$ , and boiling at  $297^\circ$  to  $299^\circ$  under 15 mm. pressure. It crystallises from pure alcohol in two distinct forms. Its formula is  $C_{27}H_{42}O_{10}$ , and its optical power  $[\alpha]_D^{25} = 45^\circ$  to  $68^\circ$ . On boiling with 10-per-cent. alcoholic solution of potash it absorbs one molecule of water, forming marrubic acid, the barium salt of which forms an ethyl ester.

**Distinction of Mydriatic Leaves.**—According to Peltriso ("Bull. d. Sc. Pharmacol." and "Phar. Zeit.," 1908, 329), the microscopic distinction of belladonna, stramonium, and henbane leaves is based particularly on the difference in the crystalline structure of the calcium-oxalate cell-deposits. In belladonna they are like sand, in stramonium star-shaped, and in henbane prisms; but these distinctions are not sharp, according to the author, sand crystals occasionally occurring in the



Belladonna  
Midrib.



Stramonium  
Midrib.



Henbane  
Midrib.

other plants—in fact, the crystals in all solanaceous plants vary. If doubts are entertained as to whether, for example, the plant in question is belladonna, the filaments, glands, and covering hair afford distinguishing proofs. The author found that the covering hairs of stramonium and belladonna are all situated on the nerves, while the upper sides are free from them. Very few of these hairs were found on belladonna, and the glandular hairs taken from its top cell might easily be mistaken for integument or covering hairs. Belladonna filaments are smooth or only slightly stippled, whereas those of datura are rough and knotted. In henbane-leaves fairly large integument hairs are found over the whole surface of the leaf—veins as well as on the upper side. The difference in the hairs also affords a means of distinction. Peltriso also bases his diagnosis on the principal nerves of the leaves. Henbane has a slightly bent middle nerve with two (sieve-tube) groups, without any clearly indicated endodermatic tissue. The collenchyma-cell girdle, lying along the whole nerve tissue, is also characteristic. Beneath both the epidermis layers are large inter-cellular spaces which only appear in the henbane-leaf. In belladonna the zone surrounding the middle nerve contains round, very thinly separated cells. In henbane the nerve groups are somewhat curved; in belladonna they are almost straight, and in stramonium they are bent sharply upwards in a horseshoe form.

## Legal Reports.

### High Court Cases.

#### A MEDICAL PRACTICE.

In the Chancery Division last week Mr. Justice Neville had before him the action by which Dr. Taylor sought to have set aside, with consequential relief, an agreement by him to purchase a one-third share in Dr. Daniel's practice at Oulton Broad, on the ground of misrepresentation, or, in the alternative, damages; but after two days' hearing it was stated that the parties had come to terms. Counsel said the partnership was to be dissolved as from that day, each party to be at liberty to practise as he chose, each party to get in the debts from his own patients, each party to pay the liabilities incurred by him and to retain his own books. All imputations were withdrawn.

#### CLAIM FOR MEDICATED LOZENGES.

At a sitting of the Justiciary Appeal Court, Edinburgh, on Thursday, May 14, the Lord Justice Clerk, Lord Low, and Lord Ardwall on the bench, an appeal was heard in which George Ratchiffe, Medical Lozenge Works, Leeds, sought to set aside a decision given by the Sheriff in a small debt action which he raised against Dr. James Farquharson, Coatbridge, in the Sheriff Court at Airdrie. In that action the appellant sought to recover 2*l.* 19*s.* for goods supplied. The Sheriff ordered proof to be led on October 15, 1907, but as no appearance was made for the respondent decree was granted for the sum sued for, with expenses. Later on, however, the case was reopened, and evidence was led, in the course of which the respondent stated that he was the owner of a chemist's shop in Coatbridge, but he knew nothing about the conducting of the shop, and left it entirely in charge of a shopman. He could not swear as to whether he had got the goods, or, if he had, whether they had been paid for or not. The Sheriff assailed the respondent from the conclusions of the summons, and the present appeal was taken on the grounds that the reopening was wrong, and that he should have had an opportunity to go into the merits of the case, or, at least, to examine the respondent's shopman. The Judges refused the appeal, and found the respondent entitled to seven guineas expenses.

#### SYPHON ACCOUNTS.

In the King's Bench Division on May 15, before Mr. Justice Darling and Mr. Justice Phillimore, sitting as a Divisional Court, the case of Geraut & Co. v. Griffin Bros. was heard, on plaintiffs' appeal from the decision of Judge Edge, in the Clerkenwell County Court, as reported in the *C. & D.*, March 21, p. 452. Mr. Lever appeared for the appellants, and Mr. Clarke Hall was counsel for the respondents.

Mr. Lever, in support of the appeal, said that the plaintiffs sued the defendants in the Clerkenwell County Court for the price of 103 syphons at 2*s.* each, making a total of 10*l.* 6*s.* The amount was very small, and leave to appeal was granted on the undertaking that the plaintiffs would pay the costs of the appeal in any event, their desire being to get a point settled which was of very great importance to the trade and to them as manufacturers and vendors of mineral waters. For some twelve years they had supplied syphons of soda and other mineral waters to the defendants, and, according to the custom of the trade, the defendants, in exchange for full syphons, returned the empty ones, a running account of money and syphons being kept. At first plaintiffs were accustomed every quarter, but afterwards every month, to send to the defendants notification as to the state of the account between them. According to plaintiffs' view, there were at the date of action 103 syphons which had been delivered to the defendants not accounted for, and they accordingly presented an account in the following form: "To balance of 103 syphons at 2*s.*, 10*l.* 6*s.*" The learned County Court Judge, on (as counsel argued) absolutely insufficient material, directed the Registrar to take an account of the syphons which had been delivered to the defendants within a period of six years preceding the action. His Honour holding that the Statute of Limitations barred plaintiffs from going into the account prior to that date. The Registrar took the account on those lines, and the result

was rather Gilbertian, because instead of the defendants owing the plaintiffs any syphons, plaintiffs were shown to owe thirteen syphons to the defendants.

Mr. Justice Darling said the trouble seemed to have arisen from the fact that the Registrar had treated syphons as if they were shillings, and it did not matter which syphons they had got. He had taken a running account in syphons as he would do in the case of shillings. If the action had been brought for 1,000 shillings, one would discharge the debt if he paid 1,000 shillings.

Mr. Lever said he had had to adopt an absolute change of front since he opened the case, because he had been prepared to argue strongly that the syphons were shillings.

Mr. Justice Phillimore: You can say it cannot be right to prevent plaintiffs from claiming syphons delivered before the six years, and yet take into account the return of some of those syphons. If your view is right the account must be wrong.

Mr. Lever said if that were so the account was indisputably wrong.

Mr. Clarke Hall submitted it was necessary to take the account in the way it was taken. It was impossible to distinguish the syphons delivered before the six years from those delivered afterwards; it was, therefore, necessary to treat the whole matter as if they were shillings.

Mr. Justice Phillimore said that seemed to be a reason for making out a running account from the beginning.

Mr. Justice Darling observed that the Registrar had found that the defendants returned more syphons than they actually received, but that, as their old friend Euclid showed, was impossible.

Mr. Clarke Hall submitted that the order of the learned Judge was right, and that the Registrar had acted upon it.

Mr. Justice Phillimore said the County Court Judge held that the plaintiffs could only retain their action for the balance of the syphons supplied and not returned during the six years prior to the action. The Registrar, however, had brought into the account other syphons as returned.

Mr. Clarke Hall agreed that the Registrar was wrong in having credited the defendant with thirteen additional syphons, and said his clients did not wish to make any claim for them. He observed that surely it was impossible to tell from the appearance of the syphons whether they were six or seven years old. The County Court Judge did not think such a thing was possible, and he (counsel) therefore submitted that the Registrar had taken a proper course, except as regarded the extra thirteen syphons with which he ought not to have credited the defendants.

Mr. Justice Darling, in delivering judgment, said he thought the appeal should succeed and that the account must be reopened and taken in the proper way. The Registrar had not taken any notice of the Statute of Limitations except as it referred to money. He had not taken any notice of it as it referred to the syphons. Yet the two accounts, if one reckoned in syphons as against money, and in money as against syphons, ought to balance just as if one were to regard the two arms of a thermometer—the maximum and the minimum. As the syphons ran down, so the money should run up. The Registrar, however, did not regard it in that way. He treated it as if there were a Statute of Limitations as regarded money; and the result of his operations was that he only regarded the six years and said the defendants within that period had returned thirteen more syphons than they had received. He thought it would help the Registrar in deciding the case if he noticed exactly what a syphon is. It is a bent tube in the shape of a "U" with one arm longer than the other, and it is absolutely impossible for more to run out at the long end than goes in at the short end. If he would bear that carefully in mind, he would have no difficulty in settling this account on the next occasion.

Mr. Justice Phillimore concurred. Assuming that plaintiffs had proved delivery of so many syphons in the six years, defendants had to discharge the onus upon them of showing that they had returned them. He assumed they produced a large number of syphons and said they were some of those which they had received during the six years and which they now returned. The plaintiffs were entitled to retort that they were received before the six



years, and the burden of proof was upon the defendants of showing that the syphons they returned were delivered within the six years and were not old syphons.

The appeal was accordingly allowed, and the case sent back to the Registrar for a fresh account to be taken.

#### THE BILE-BEANS LITIGATION.

In the Court of Session, Edinburgh, on May 16, Lord Salvesen gave judgment on the question whether an actionable case to go before a jury had been stated on record by George Graham Davidson, chemist, trading under the firm of Davidson & Co., 14 Queen Street, Edinburgh, and having a shop at 1 Earl Grey Street, Tolleross, there, against C. E. Fulford, Ltd., Greek Street, Leeds, in which damages are laid at 10,000*l.* for alleged slander. Altogether seven issues were proposed, and his Lordship's remarks were largely directed to the first of these. He showed how the defenders came into the original action against the pursuer by the Bile Beans Co. having acquired the whole rights of that company, including the right to prosecute the appeal to the House of Lords after the Court of Session decisions in favour of the pursuer. In so prosecuting, the defenders on April 30, 1907, lodged their case, the appendix to which contained the following passage, which was founded upon in the first part of the present case, "that the result of the evidence is that the respondent has been guilty of intentional and deliberate fraud," and they further averred that he had devised an elaborate scheme for fraudulently passing off and selling pills of his own manufacture as being pills manufactured by the appellants. His Lordship now held that this was privileged, and pointed out that, although it might technically have been published by the printing and lodging of the case, it was not really published in any true sense. In all probability it did not reach any member of the outside public, and, as the appeal was never put out for hearing, would certainly not be read by the noble lords to whom the argument was addressed. His Lordship accordingly disallowed the first issue. The second was as follows:

Whether on or about October 31, 1907, within the premises at 219 Newport Road, Middlesborough, the defenders acting by Mr. Nixon falsely and calumniously represented to Walter R. Brackenbury, chemist, that the pursuer's guarantee was worthless, or used words to the like import or effect, meaning thereby that the pursuer was of no substantial credit, to the loss, injury, and damage of the pursuer.

The other five issues were in similar terms, except that the dates were different and the names of the parties and places as follows: Messrs. Harrison & Son, chemists, 38 Hylton Road, Sunderland; J. A. Barlow, 159 Padiham Road, Burnley; James Dunn, chemist, 360 Scotswood Road, Newcastle; H. T. Bates & Co., chemists, New Banwell, Newcastle; and Mr. Lewis Watson, chemist, Linthorpe Road, Middlesborough. His Lordship said the statement was in each case made by the defenders through their authorised agents, and in his opinion the statement was capable of being read as an imputation upon the pursuer's financial position, and was equivalent to saying that the pursuer was a person of no means. His Lordship therefore came to the conclusion that the pursuer must inuendo the statement to the effect above indicated before he could allow the issue. The guarantees that the pursuer granted or offered to grant might conceivably have been worthless for other reasons than his financial weakness. As the pursuer had only succeeded in obtaining the issues which he had allowed after an extensive amendment of his record, he would deal with the matter by finding no expenses due or by either party since the closing of the record.

#### Veterinary Surgeons Act.

##### CANINE AND FELINE SPECIALIST.

At Portsmouth on May 14, Albert Henry Kemp Smith, 17 Meadow Street, Southsea, was summoned at the instance of the Royal College of Veterinary Surgeons for acting as a veterinary surgeon without a certificate. It was stated that defendant exhibited in his window cards stating that he was a "canine and feline specialist" of thirty-six years' experience, and that all operations would be skilfully and

humanely performed by him. By so doing, defendant held out, it was contended, that he was qualified to practise a branch of veterinary surgery. On defendant undertaking to withdraw the cards, the Bench imposed a nominal penalty of 1*s.*, with 7*s.* 6*d.* costs.

#### Sale of Food and Drugs Acts.

##### DECOCTION OF ALOES.

At the South-Western Police Court, London, last week, Bamborough, Ltd., chemists, 7 South Side, Clapham Common, were summoned by the Wandsworth Borough Council for having sold to the prejudice of the purchaser compound decoction of aloes deficient in alcohol, extract of Barbadoes aloes, and extract of liquorice to the extent of 55 per cent. Mr. W. W. Young, prosecuting, said there was too much water in the concoction, made up in pursuance to a doctor's prescription. A similar prescription was prepared by another local chemist accurately. The defendants were represented by the manager, who stated that they were out of the compound, and in order to make up the prescription some was borrowed of a neighbouring chemist. Their drugs were obtained from the best makers, and this would not have happened had they the drug in stock. Mr. de Grey (the Magistrate) did not think the defendants were altogether to blame, having obtained the drug from another chemist. He imposed a penalty of 20*s.*, with 3*s.* 6*d.* costs.

#### County Court Cases.

##### A CHEMICAL PATENTEE'S DEBTS.

Mr. T. M. JOSEPHSON, of Imperial Chambers, 95 Great Eastern Street, E.C., is interested in several chemical patents, and when summoned by a creditor before Judge Bray at Shoreditch County Court on May 19, he admitted that he is managing director of a company at 300*l.* a year, but he gets nothing. He added, "I hold 2,500 shares, and the Marquis of Huntly purchased the half-share of my patents for 5,000*l.*, but I have not had the money yet and therefore can do nothing. I still hold the bills which the Marquis accepted for the 5,000*l.* . . . If my arrangements with the Marquis of Huntly turn out all right and my patents all right, then I am all right, but otherwise I am all wrong. Anyway, I can offer nothing now." Judge Bray: I will make a new order of 4*l.* a month. Later in the day Mr. Josephson was the defendant in an action by a firm of solicitors to recover twelve guineas for services rendered, and he was ordered to pay the amount and costs.

##### QUESTION OF LIABILITY.

In the City of London Court, before Judge Rentoul, K.C., on May 15, Upfield, Green & Co., Tenter Street, sued Mr. W. Brummell, trading as the Payne Chemical Co., 71 Gamage Buildings, Holborn, to recover 2*l.* 9*s.* 6*d.* for goods sold and delivered. Defendant said he gave the orders on behalf of the Payne Chemical Co. He was merely their agent. The plaintiffs should have sued the company and not him.—Plaintiffs said they received the orders from the defendant. They knew nothing of the Payne Chemical Co. Defendant had promised payment. Defendant: That was on behalf of the company. I have an agreement with the Payne Chemical Co.—Judge Rentoul said that the plaintiffs knew nothing of that.—Defendant: But I had a private account with them.—Plaintiffs said that they had never been told that the defendant was not the principal of the concern. Defendant was the only person whom they had known in the case.—Defendant said he admitted that, but he declared that he told the plaintiffs that he gave the order on behalf of the company. He had paid several accounts by his own cheque. Payne's Chemical Co. was really Mr. E. E. Belky, 32 Museum Chambers.—Plaintiffs said they knew nothing of that. They had trusted the defendant all along.—Judge Rentoul said the defendant could not get out of it, and he found for the plaintiffs for the amount claimed, with costs.

THE CHEMICAL SOCIETY OF ROME, the Chemical Society of Milan, and the Association of Industrial Chemists of Turin will, after January 1, 1909, be united under the name of the Italian Chemical Society.

## Bankruptcies and Failures.

**Re MARY ANNE LAWRENCE**, 59 Station Road, Erdington, Druggist.—Under this failure the trustee reports that the winding-up of the estate has realised sufficient to pay to the unsecured creditors a first and final dividend of 1s. 8d. in the pound.

**Re FRANK MAGGS**, Lyndhurst Park Crescent, St. George, Bristol, Chemists' Export Packer.—A meeting of the creditors was held at Bristol before the Official Receiver (Mr. F. C. Clark), the gross liabilities being stated at 131l. 2s. 6d. and the deficiency 69l. 6s. 1d. Debtor was adjudicated bankrupt, and the Official Receiver is trustee.

**Re FREDERICK J. T. LONG**, 1 New Bridge, Dover, Chemist and Druggist.—The adjourned public examination took place at Canterbury on May 14. The Official Receiver said that since the last adjournment an affidavit had been lodged, together with the deed of dissolution. In answer to the Official Receiver debtor said the value of the business on the dissolution was 950l. He paid his brother the sum of 350l., which was a half-share of the business, less the value of the stock and goodwill, which was only 250l. He further paid his brother 125l. in respect of the restraint for his non-trading. His brother had the whole 475l. The Official Receiver: So that he received 475l. as his share rather than 750l., as stated on the last occasion?—Debtor: Yes. You made a mistake of about 300l.?—Yes. The examination was closed.

**Re HENRY CHANNING STEPHENS**, late of College Chambers, High Holborn, Drug-merchant.—The receiving-order in this case was made upon the petition of a creditor who claimed in respect of the costs of an action unsuccessfully brought by the debtor to recover moneys alleged to have been paid by him. The first meeting of creditors was held on May 15 at the London Bankruptcy Court, when Mr. Egerton S. Grey, Official Receiver, reported that only one proof of debt had been tendered, and that the debtor had not surrendered. Mr. Hotherington, on behalf of the petitioning creditor, stated that the debtor retired from the firm of B. W. Hair, drug-merchants, College Chambers, in January last, when the action against the petitioning creditor was pending. The only assets of which he had any knowledge were a grand piano and some pictures. He understood, however, that the debtor had an interest under his parents' marriage settlement. The Chairman intimated that the case would remain in his hands to be wound up in the ordinary course, and if the debtor failed to attend on or before June 2, the date fixed for his public examination, it would be open to the Official Receiver to apply for a warrant to secure his presence.

## Deed of Arrangement.

**ROBERT WILLIAM THILDESLEY**, 129 Wellgate, Rotherham, Chemist and Druggist.—Trustee, A. E. Aizlewood, Rotherham, C.A. Dated May 12, filed May 13. Secured creditors, 26l.; liabilities unsecured, 1,014l.; estimated net assets, 348l. Composition of 10s. in the pound by four equal instalments on May 26 and September 26, 1908, and January 26 and May 26, 1909, secured by a surety and by an assignment upon trustee. The following are creditors: Anglo-American Optical Co., London (26l.); Potter & Clarke, Ltd., London (11l.); Yardley & Co., Ltd., London (12l.); Harrison & Waide, Leeds (14l.); Ayrton, Saunders & Kemp, Ltd., Liverpool (19l.); J. Woolley, Sons & Co., Ltd., Manchester (350l.); J. F. Wilkinson, Manchester (23l.); Newball & Mason, Nottingham (10l.); W. H. Collins, Rotherham (259l.); H. W. Green, Rotherham (27l.); Thornton & Sons, Rotherham (39l.); Heath Bros., Salford (41l.); Raines & Co., York (26l.); York Glass Co., York (24l.); bankers' claims (19l.).

## Gazette.

### Partnerships Dissolved.

**LAMBERT, G. J.**, and **WESTON, W. T.**, manufacturers of artificial teeth, Priory Road, Hornsey, N., under the style of The Central Teeth Company.

**MOYSEY, F. G.**, and **COOKE, A. T.**, manufacturers of Steralis mineral waters, Amies Street, Battersea, London, S.E., under the style of Cooke & Moyssey.

### The Bankruptcy Acts, 1883 and 1890.

#### ADJUDICATION.

**DAKRYL, HANNA NASSIF**, Holland Road, Kensington, W., doctor of medicine of the University of Paris.

## New Companies and Company News.

**KATARO MEDICATED AIR CO., LTD.**—Capital 3,000l., in 1l. shares. Objects: To take over the business of manufacturers of medicated-air inhalers carried on by E. P. Blyth and R. C. Faithfull at 25 Waterloo Road, S.E., as the "Kataro Medicated Air Co."

**ALLOA GLASSWORK CO., LTD.**—Registered in Edinburgh. Capital 30,000l., in 1l. shares. Objects: To acquire and carry on the business of the Alloa Glasswork Co. The first directors are J. J. Mowbray, A. Mitchell, W. Wallace, R. McGowan, W. M. Duncanson, and J. E. Bray. Qualification, 500l. Registered office, Glassworks, Alloa.

**GEORGE H. ANDERTON, LTD.**—Capital 40,000l., in 10l. shares. Objects: To take over and carry on the business of the late G. H. Anderton, agricultural and manufacturing chemist. The first directors are Laura E. Anderton, H. W. Nichols, and T. Hall. Registered office, Howden Dyke, Howden, East Yorks.

**RAMPON & INGRAM, LTD.**—Capital 3,000l., in 2,920 ordinary shares of 1l. each and 1,600 deferred shares of 1s. each. Objects: To acquire and carry on the business of wine and vinegar manufacturers and vendors carried on by C. Rampon as "Rampon & Co." The first directors are C. Rampon, C. Ingram, A. B. Betts (chairman), and T. P. Chubb. Registered office, 19-21 Emmett Street, Limehouse, E.C.

**CADAS, LTD.**—Capital 25,000l., in 24,000 participating preference shares of 1l. each and 20,000 deferred shares of 1s. each. Objects: To acquire the interests of A. H. Fellows in certain formulae, recipes, or processes in connection with soap and other toilet requisites, to take over the business of soap-manufacturers carried on at the Imperial Soapworks, Stratford, E., as "J. Williams & Son, Ltd.," and to adopt agreements (1) with the said A. H. Fellows, and (2) with J. Williams & Son, Ltd. Minimum cash subscription, 100l. The first directors are R. B. Fraser, F. C. Gooch, J. B. Messer, J. P. W. H. Peach, J. P., and A. H. Fellows. Qualification, 100l. shares. Remuneration, 150l. each per annum (chairman, 200l.) and 10 per cent. of the surplus net profits after 7 per cent. has been paid on the preference shares, divisible.

**CASTNER-KELLNER ALKALI CO., LTD.**—The directors recommend an interim dividend at the rate of 10 per cent. per annum for the six months ended March 31 last.

**LIEBIG'S EXTRACT OF MEAT CO., LTD.**—The directors recommend a final dividend of 10 per cent. on the ordinary shares for 1907, together with a bonus of 2s. 6d. per share, both free of income-tax, making 22½ per cent. for the year.

**BRUNNER, MOND & CO., LTD.**—The directors announce an ordinary dividend for the half-year ended March 31 of 30 per cent., free of income-tax, and the preference dividend of 7 per cent., carrying forward 35,000l., placing to reserve 100,000l., and writing off patents 2,500l.

**SANTAS CO., LTD.**—The report for the year, which ended on March 31, states that notwithstanding the ever-increasing competition and the bad summer season last year, the sales have been satisfactory. The balance to credit of profit-and-loss account, after making provision for bad debts, repairs, and advertising, and adding the amount brought forward, is 15,549l. Interim dividend amounting to 3,515l. has been paid, leaving, after payment of debenture interest, directors' fees, and income-tax, a balance of 9,835l. As reported in the C. & D. last week (p. 752), the directors recommend a final dividend of 3½ per cent., making a total of 6½ per cent. for the year; 2,000l. is placed to reserve, leaving 2,563l. to be carried forward. Debenture shares to the value of 2,000l. have been drawn for redemption on December 31, 1908.

**W. J. BUSH & CO., LTD.**—At the annual meeting held at the Institute of Chartered Accountants, Moorgate Place, London, E.C., on May 15, Mr. J. Mortimer Bush (chairman and managing director) said that, although the volume of business done was greater, the net profit during the year was less, owing to increase in expenses and the less profitable character of business. The causes of this loss he attributed to the depression in the mineral-water trade, owing to the bad summer of 1907 and to the exceptional fluctuations of the markets in several of the most important commodities handled by the company. Mr. Bush also pointed out that for years past they had steadily increased the amount of the carry forward, in accordance with the policy of increasing the value of the goodwill. Mr. Bush touched incidentally upon American trade, and mentioned the muddle which the Federal Food and Drug Act, with State laws on the same subject, had put chemists and manufacturers into. The meeting unanimously adopted the directors' report, and agreed to the dividend of 6 per cent. on the ordinary shares. On the motion of Mr. A. W. Bush, seconded by Mr. Pearce, Sir George Hayter Chubb, Bart., was re-elected a director. A vote of thanks to the chairman and directors concluded the proceedings.



**MORTGAGES AND CHARGES.**—*Imperial Drug stores, Ltd.*, London. Particulars of 200*l.* debentures, created by resolution of May 7, 1908, have been filed.—*W. Oldaker, Ltd.*, veterinary specialists, Newcastle-on-Tyne. A debenture dated May 8, 1908, to secure 500*l.*, has been registered, with J. R. Sanderson, 25 Queen Street, Ramsgate, and T. Hall, 18 Bigg Market, Newcastle-on-Tyne, as the holders.

## Births.

**JAMES.**—At 37 Richmond Avenue, Headingley, Leeds, on May 17, the wife of H. P. James, pharmaceutical chemist, of a daughter.

**KNOTT.**—At 10 Birchwood Avenue, Muswell Hill, N., on May 16, the wife of W. R. Knott (R. J. Reuter's), of a daughter.

**MILNER.**—At 25 Barfield Road, Lavender Hill, S.W., on May 1, the wife of A. H. Milner (of Sanger's), of a daughter.

**PARRY.**—At "Blencathra," Ewell Road, Surbiton, on May 18 and 19, the wife of Ernest John Parry, B.Sc., F.I.C., of triplets (two girls and a boy).

**WEBSTER.**—At Brooklyn, N.Y., on May 5, the wife of Magnus H. Webster, Ph.C., of a daughter. [Corrected note.]

## Marriages.

**CHRISTIE-KAY.**—At the Royal Hotel, Largs, on May 13, by the Rev. Joseph Mitchell, B.D., Mauchline, James Christie, chemist, Largs, to Isabel Mc'Cosh, second daughter of the late Mr. Andrew Kay, and of Mrs. Kay, Haugh, Mauchline, and Royal Hotel, Largs.

**JONES-COLLINS.**—At Oxendon Presbyterian Church, Haverstock Hill, London, N.W., on May 7, Walter Eyton Jones, chemist and druggist, to H. L. Collins, eldest daughter of Mr. J. P. Collins.

**NOBLE-JONES.**—At St. Nicholas Church, Sutton, Surrey, on May 7, by the Rev. A. E. B. Lister, M.A., Sam Atkinson Noble, chemist and druggist, Croydon, to Edith, younger daughter of Mr. William Jones, of Lyndhurst, Sutton.

## Deaths.

**BELOHOUBEK.**—The death occurred in Prague, on May 8, of Professor Dr. Aug. Belohoubek, Professor of Chemistry of the Prague University, aged sixty-one. Professor Belohoubek was originally a pharmacist, and in 1889 he was appointed Professor at the Prague University. He was also associate of the Ministry of Commerce in Vienna, member of the Scientific Council of the State Regie Pharmacy in the Royal General Hospital in Prague, honorary member of the Prague Pharmaceutical Society, and corresponding member of the Société de Pharmacie in Paris, etc. Through the death of Professor Belohoubek the Prague University loses a zealous and capable member of its staff, and Austrian pharmacy is bereft of a trusty friend.

**BOYCE.**—On May 3, Mr. Henry Boyce, Beccles, Suffolk, aged eighty-nine. The late Mr. Boyce was the father of Mr. Henry Boyce, manager of Messrs. B. A. Smith & Co., chemical merchants, 4 Church Row, Aldgate, E.C.

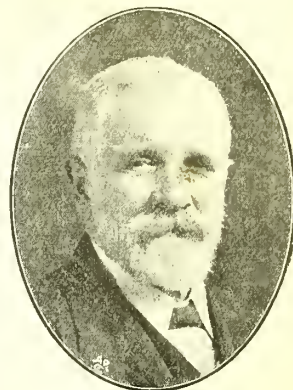
**FULLER.**—At "Rookwood," Mount Park Crescent, Ealing, W., on May 17, suddenly, Mr. John Fuller, chemist and druggist, manager of the dispensing department of the Junior Army and Navy Stores, London, aged fifty-nine. Mr. Fuller was in business on his own account when the Pharmacy Act passed in 1868, and afterwards was manager of the Brighton and Hove Co-operative Society's drug department before he went, in 1893, to the Junior Army and Navy Stores as manager.

**LAMB.**—At Altrincham, on May 4, Mr. Robert Lamb, chemist and druggist, aged sixty-one.

**POTHS.**—At Freiburg, Baden, on May 9, Mr. Carl Hermann Poths, the founder of the firm of H. Poths & Co., druggists' sundriesmen, London, aged seventy-two. Mr. Poths spent the first eight-and-twenty years of his life in Stuttgart, where he was engaged in the druggists' and druggists' sundries businesses, and came to London about 1867 to start on his own account as a bottle and box merchant. In this he was successful, and his goods became well known throughout the United Kingdom. A few years ago the business was taken over by Messrs. Johnsen & Jørgensen; but the old trading-name was continued, and Mr. Poths actively participated in it until early in 1905, when he retired, and he and Mrs. Poths went to live in Freiburg, Baden—Mrs. Poths' native place. It was there that he died from a paralytic seizure which attacked him a fortnight before. The funeral took place on May 12.

**RUSSELL.**—At Glasgow, on May 11, Mr. John Russell, chemist and druggist, aged thirty-five. Mr. Russell was at one time in business on his own account at Rutherglen Road.

**TAYLOR.**—At 79 Hamstead Road, Handsworth, Birmingham, on May 18, Mr. Arthur Camden Taylor, chemist and druggist.



## Personalities.

MR. GEORGE OWEN, chemist and druggist, has been elected a sidesman of St. John's Church, Sheffield.

MR. C. J. WAIN, pharmaceutical chemist, has been elected Vice-President of the Newcastle-under-Lyme Traders' Association.

MR. G. W. BULLEN, pharmaceutical chemist, has been nominated to fill a casual vacancy on the Ashby-de-la-Zouch Board of Guardians.

MR. J. W. DANSIE, of the Crown Perfumery Co., Homerton, London, E., leaves this week by the *Virginian* for a business-tour in Canada.

MR. W. DAWN COPLEY, of Bulawayo, arrived by the *Tintagel Castle* at Southampton last week and is resting in Devonshire, but goes to the Midlands in a few days.

MR. AUBREY T. HILL, of Messrs. Sharp & Dohme, Baltimore, arrived in Liverpool by the *Lusitania*, on May 12, and is now enjoying some golfing in England. He returns in the course of a few weeks.

MRS. JESSE BOOT laid the foundation stone of the new Wesleyan Albert Hall, Nottingham. In the course of the addresses delivered, Mr. Boot expressed the hope that an organ would be added, so that concerts could be given in the new hall.

MR. RIVERS LANGTON, J.P., representative in Australasia of Messrs. Davy Hill & Hodgkinsons, Ltd., and a member of the Executive Committee of the Imperial Federation League, is to give a lecture on "Imperial Federation; Its Aspirations and What it Means," at the Town Hall, Melbourne, Vic., next month.

ALDERMAN A. SIDNEY CAMPKIN, J.P., has been unanimously re-elected Chairman of the Assessment Committee of Cambridge, a position he has held for the past twenty years. The committee is composed of heads of the University and members of the Town Council and Board of Guardians, and the position is more onerous than usual this year in consequence of the completion of the re-valuation of the Town and University buildings and the possibility of numerous appeals.

## Trade Notes.

**MESSRS. JOHNSEN & JØRGENSEN** have recently taken over the large premises of the Glasgow and Edinburgh Assurance Co. at 26 and 27 Farringdon Street, E.C., which they are using as administrative headquarters. They are fitting up a series of showrooms, which will be ready for inspection next month.

**PHOSFERINE.**—Messrs. Ashton & Parsons, Ltd., of La Belle Sauvage, Ludgate Hill, London, E.C. (the proprietors of "Phosferine"), ask us to state that their wholesale terms are available for any quantity, however small, and that the terms are not limited to a minimum order for 5*l.* worth. They will be pleased to supply any chemists direct who experience difficulty or delay in obtaining supplies through their ordinary channels.

**MEDICATED SOAPS.**—When Unna and other Continental dermatologists introduced medicated soaps as an adjunct in the treatment of skin diseases one of the first firms in this country to produce these soaps was Messrs. Midgley, Ltd., St. Anne Square, Manchester. The firm have carried the production of these to a high level, and will be pleased to submit to home and foreign buyers a list of their products or to quote for any special formula required.

**SULPHO-VASELINE FOR DOGS** is a new product of the Chesebrough Manufacturing Co., 42 Holborn Viaduct, London, E.C. Galenically, this is an elegant preparation of all-round utility for skin-diseases in dogs, especially eczema and the varieties of mange. We have had an opportunity of observing how soothing it is when applied. Sulpho-vaseline is put up in good style to retail at 1*s.* It keeps in any climate, and is therefore well suited for exportation.

**THE "ANTIDOTAL" TOOTH-BRUSH**, which has been introduced by Messrs. W. Addis & Son, 44 Herbert Street, Hoxton, London, will appeal to those who like to get the brush well over their teeth. As will be noted from the sketch, the head of bristles is shorter than usual and the bristles are so arranged as to get well over the incisors and canines back and front, as well as into the molars and interstices.



**WASHING SODA.**—For some time past a crusade has been carried on against the sale of sodium sulphate mixtures as "washing soda," "soda," or "soda crystals." Chemists can appreciate the fraud on the public in selling a neutral salt when an alkaline chemical is required for grease removal or water softening. There is, however, a risk of selling some of the imitation soda, innocently, if care is not taken in buying. A notice which appears in our advertisement pages is intended to put chemists on their guard against buying adulterated sodium carbonate.

**A NEW CLINICAL.**—A new method of graduating clinical thermometers is exhibited in the Usher-Somers' instrument which is put on the market by Messrs. Southall Bros. & Barelay, Ltd., Birmingham. In this thermometer the normal temperature of the human body is marked as "0," the degrees over and below being graduated from the normal. Thus the temperature would be spoken of as so many degrees above normal instead of by the actual degree, according to the Centigrade or Fahrenheit's scale. The new graduation is very simple, and the readings will be more easily understood by the public.

**RIEDEL'S "BERICHTE."**—From the London office of the J. D. Riedel Co., Cross Lane and Harp Lane, E.C., we have received a copy of this annual report and index published (in German) in Berlin. It is a handsome volume of nearly 400 pages, the first forty-six of which are devoted to accounts of researches in the Riedel laboratories during the past year. The second part (257 pages) is a list of all the new remedies which have been introduced into medicine during the past twenty years. It tells what they are, what they are used for, and how they are used. The notes are concise, and the list is most valuable to those who can read German. The concluding part of the volume is devoted to Riedel medicinal specialities.

**"CORYFIN."**—The Bayer Co., Ltd., 19 St. Dunstan's Hill, E.C., submit a sample of this new product, which is designed to replace menthol. "Coryfin" is stated to be the ethyl-glycollic ester of menthol. It is a liquid possessing a faint mentholic odour, and when applied to the skin it has a menthol action, which manifests itself for several hours, owing to gradual decomposition of the ester. "Coryfin" is applied in headaches and nasal catarrh, and is used as a gargle in pharyngeal catarrh and laryngitis. A few drops can be given on sugar internally as a carminative and in all throat cases. It is put up in special bottles, with a brush attached to the stopper, to retail at 9*d.* per bottle.

**PULV. GLYCRRHIZÆ CO., SINE SACCHARO.**—The late Mr. Balmanno Squire's recent letters in *THE CHEMIST AND DRUGGIST* regarding a compound liquorice-powder for persons who suffer from diabetes, or other ailments in which the administration of sugar is undesirable, gives special interest to a powder without sugar which has been introduced by Messrs. Lorimer & Co., Ltd., Britannia Row, London, N. It is not made according to Mr. Balmanno Squire's formula, but by a process designed by Messrs. Lorimer & Co. themselves, and in all respects it resembles the official powder except that it is free from sugar, and is half the B.P. strength.

**THIS ELEGANT PERFUME-SPRAY** is one of a new series stocked by Mr. R. J. Reuter, 6 Well Street, London, E.C.

The sprays are made by M. Th. Martin, of Paris, the manufacturer of the well-known "T. M." brand of pump-sprays, and it will be observed that the design is unique as well as novel, the more expensive sprays being produced in handsomely cut glass. They are made with nickel, plain gilt, and engraved gilt mountings, and the prices run from 22*s.* 6*d.* to 160*s.* per dozen. A full range of them is displayed in Mr. Reuter's showrooms, and chemists who cannot visit these can obtain further particulars on application.



## Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

**MR. A. T. THOMPSON**, chemist and druggist, Bradshawgate, Leigh, Lancashire, has purchased from the executors of the late Mr. J. J. Conway, chemist and druggist, the business formerly carried on by him at 12A Leigh Road, Leigh.

THE extensive alterations, almost amounting to rebuilding, at the premises 456 Oxford Street, W., occupied by Messrs. J. G. Gould & Co., chemists, are now almost completed. Business has been carried on during the time the work has been in progress.

**MR. IDRIS PHILLIPS**, pharmaceutical chemist, has purchased the business at 42 Oxford Street, London, W., carried on by Messrs. J. Grieve and S. C. Mandelson, pharmaceutical chemists, trading as Manrieve & Co., English and foreign chemists.



## Association Affairs.

### Guildford Chemists' Association.

THE last meeting of the session was held on Wednesday, May 13, when Mr. Simpson presided. It was decided to present copies of Gadd's "Physicians' and Pharmacists' Pocket-book" to medical men in practice in the district. Several of the members present accepted an invitation from the Thames Valley Chemists' Association to join their up-river excursion. A new member was elected.

### Preston Chemists' Association.

A MEETING was held at the Bull and Royal Hotel, Preston, on May 18. The Secretary was requested to inquire into the advisability of holding a full-day picnic this year. Replies to the petition sent by the Association concerning Mr. Winfrey's Pharmacy Bill were read from Mr. H. Cox, M.P., and Mr. J. T. Macpherson, M.P.—The balance-sheet, presented by the Treasurer, showed a favourable balance, and was passed unanimously.

### Chemists' Assistants' Association.

THE following have been elected office-bearers for the 1908-9 session:

*President.*—R. H. Brittain.

*Vice-Presidents.*—A. R. Arrowsmith and E. Thompson.

*Hon. Vice-President.*—W. G. Northey.

*Treasurer.*—A. Latreille.

*Secretary.*—F. L. K. Loxley.

*Ordinary Members of Council.*—J. Clark, J. H. Northey, F. W. Crossley Holland, L. Gwatkin, E. Lee Merry, A. S. Peake, P. Phillips, and R. Warrick.

*Auditors.*—C. Morley and A. B. Makepeace.

### Bath Pharmaceutical Association.

THE Annual Supper was held at Taylor's Restaurant, New Bond Street, Bath, on Thursday, May 14, when a large number of members and visitors sat down to an excellent repast. Mr. B. John, in the unavoidable absence of the President (Mr. A. C. Olds) was in the chair, and the vice-chair was occupied by Mr. E. W. Loveless. Mr. John proposed the toast of the "Pharmaceutical Society and Local Associations," which was responded to by Messrs. L. Wilson and H. K. Pryke. Mr. J. W. Sampson proposed "The Visitors," to which Messrs. Boorne and Trebilco replied. A musical programme was carried out by Messrs. F. Cooper, Hawes, Loveless, Martin, Snow, and A. Taylor.

### Harrogate Pharmaceutical Association.

THE annual general meeting was held at the Salisbury Hotel, Harrogate, on May 8. Mr. Chas. B. Southwell (President) was in the chair, and Messrs. Atkinson, Eynon, Fenn, Halliday, Hines, Mote, Pattinson, Ridge, Rudd, Weston (Hon. Treasurer), Leak, and Russell (Hon. Secretary) were also present. The report was read and adopted.

**ELECTIONS.**—Mr. T. E. Handford, Ph.C., was unanimously elected President, Mr. George Weston Hon. Treasurer, and Mr. H. B. Rudd Hon. Auditor; committee: Messrs. Fenn, Eynon, Mitchell, and Pattison; and Mr. F. T. Leak Hon. Secretary. Cordial votes of thanks were accorded to the retiring officers, also to Mr. Hines for taking charge of the musical items during the session. A smoking-concert was held at the conclusion of business.

### West Ham Chemists' Association.

THE members paid a visit to the works of Price's Patent Candle Co., Ltd., at Battersea, on Thursday, May 14. The chief departments were visited under the guidance of Mr. W. L. Calderwood and Mr. J. McArthur, who explained the various stages and processes of soap manufacture, from the separation of the glycerin to the final stages of moulding, stamping, and packing. The candle department proved extremely interesting, and the same may be said of the production of night-lights, a department in which Mr. John Burns, President of the Local Government Board, was at one time employed. The company make practically all the articles

required in their business and employ 2,000 people. Before leaving the party was hospitably entertained at the Belmont Dining Club, and the President (Mr. W. R. Barnes) proposed a vote of thanks to Mr. Calderwood and Mr. McArthur. In his reply Mr. Calderwood said that the visit had given him much pleasure.

### Leicester Chemists' Association.

THE annual meeting was held at the Turkey Café, Leicester, on Tuesday, May 12, Mr. S. F. Burford, F.C.S. (President), in the chair. There were also present Messrs. Blockley, Clear, Cleaver, Fry, Hind, Lewis, Marsh, Ough, Rowe, Ward, Wilby, Avery, and Marfitt.

**ANNUAL REPORTS.**—Mr. G. E. Marfitt read the report by himself and Mr. Avery (Hon. Secretaries), which covered nearly a year and a quarter. The work done during that time was mentioned. The membership had increased to forty-seven, including one lady chemist. Prizes had been given to the students at the technical schools, and a prize competition, on the lines of the Fairchild scholarship, had been held for the book given by Messrs. Burroughs Wellcome & Co. The winner has since passed the Minor examination. The committee had met eleven times, and numerous sub-committee meetings had been held. Mr. Marfitt appealed for better attendances at the various meetings, there being room for improvement in this respect.—Mr. S. E. Cleaver (Hon. Treasurer) presented his report, showing that there was a good balance in hand. Both reports were adopted.

**OFFICE-BEARERS.**—Votes of thanks having been accorded to the officers for their services during the past year, the following were elected for 1908-9: President, Mr. S. F. Burford, F.C.S.; Vice-President, Mr. A. D. Hearnshaw; Hon. Secretaries, Messrs. G. E. Marfitt and C. J. Avery; Hon. Treasurer, Mr. E. B. Ward. For committee fourteen names were submitted to the ballot, and the following were declared elected: Messrs. H. W. Clear, W. T. Hind, W. J. Lewis, L. Ough, F.C.S., W. Rowe, W. Thirlby, and F. T. Wilby.

**OTHER BUSINESS.**—Mr. Burford was nominated as delegate to the British Pharmaceutical Conference at Aberdeen.—Mr. E. A. A. Fry gave notice to bring forward at a subsequent meeting the question of uniformity in the town in regard to selling poisons in poison bottles.

### Leeds Chemists' Association.

THE annual meeting was held at the Church Institute, Leeds, on Wednesday evening, May 20, Mr. F. Pilkington Sargeant in the chair.

**BOWMAN PRIZES.**—Dr. Symes adjudicated upon the Bowman competition papers, and the President reported that he was fairly well satisfied, but complained that the candidates were rather stronger in theoretical than in practical knowledge, and also that candidates, particularly in the senior section, were not quite able to calculate quantities as easily as they ought to do. Mr. Bowman's remarks last year had not borne much fruit in the way of inducing junior candidates to enter the competition. The President added some suggestions for the new Council in regard to the competition, and presented the prizes to the winners. viz.:—Senior Competition: 1, Mr. Fletcher; 2, Mr. Webster; 3, Mr. Thurston; 4, Mr. Archer. Junior Competition: 1, Mr. G. E. Johnson; 2, Mr. J. L. Matthews. Upon the motion of Mr. Thurston, a vote of thanks was accorded to Mr. Bowman for giving the prizes.

**ANNUAL REPORT.**—Mr. J. R. Bentley (Secretary) read his report, which showed a slight increase in the number of members. Mr. Beacock (Treasurer) reported that the year commenced with a balance in hand of 7s. 3½d., and terminated with a balance of 5s. 9½d. The total turnover had been 100l. 15s. 6d., and of this 41l. had been subscribed for and contributed to the Pharmaceutical Benevolent Fund.

**NEW OFFICERS.**—The following were elected: President, Mr. F. Pilkington Sargeant; Vice-Presidents, Mr. W. D. Pollitt and Mr. J. H. Beacock; Treasurer, Mr. T. Horner; Secretary, Mr. J. R. Bentley; Council, Messrs. F. W. Branson, E. Crawford, J. Calverley, R. Fourness, J. R. Kirk, F. C. Long, S. R. Mundell, H. Stringer and

G. W. Worfolk. After a brief reference to the proposed union, the office-bearers were thanked for their services during the past session.

### Three Towns Chemists' Association.

THE Plymouth, Devonport, and Stonehouse Association met for the last time this session at Plymouth on May 14, Mr. R. F. Roper (President) in the chair.

AN EXCURSION will be taken in June, and Messrs. Roper, Spear, Perkins, E. G. Turney, Park, F. Barge, Maitland, Goodwin, A. D. Breeze, Condy U'Ren, Davey, and the Secretary were appointed to arrange the details.

JUNIOR SECTION PRIZES were presented by the President to Mr. Harold Andrews (1st) and Mr. A. C. Cannon (2nd), both of whom the President congratulated; and on the motion of Mr. F. Maitland thanks were accorded to the donors and to Mr. J. Davey Turney, who conducted the examination.

COD-LIVER OIL EMULSIONS.—Mr. Roper submitted the following notes on the formulas printed by the "British Pharmaceutical Codex":

EMULS. MORRHUE PANCREAT.—A fairly satisfactory preparation, but if required to be kept the gums ought to be increased 25 to 50 per cent., otherwise it separates.

EMULS. MORRH. PANCREAT. C. EXT. MALT. (VEL BYNO).—In this the extract ordered would read the solid extract, especially as it is ordered to be made in a *warm* mortar. Prepared this way it makes a satisfactory solid preparation. If the fluid extract is used a very good emulsion is made, but the malt extract does not cover the taste of the oil. The addition of a small quantity of essence of vanilla greatly improves it. It would be of great assistance if it were definitely stated which extract is intended.

EMULS. OL. MORRHUE.—Not sufficient acacia ordered, but if the amount of gum is doubled a very satisfactory preparation results which does not separate.

EMULS. OL. MORRHUE CO. AND EMULS. OL. MORRH. CO. C. HYPOPH.—Both require 25 per cent. more gums, which give preparations still fluid and do not separate.

The Secretary also commented on some of the preparations classed as emulsions, and in the course of his remarks said both emulsions of petroleum separate on standing. Emuls. petrol. c. glyceroph. would be greatly improved if it had the same amount of tragacanth as in the one with hypophosphites. Mr. F. J. Barge spoke on the elixirs and glycerins. His remarks were critical, but chiefly commendatory. Mr. Goodwin and Mr. Spear also spoke, and the authors were thanked.

### OTHER BUSINESS.

The President drew attention to the recent prosecution of an unqualified trader for selling quinine-wine, and thought possibly the Revenue authorities might well consider if the sale of such spirituous preparations as spt. æther. nit., etc., did not come under the same heading. [See *C. & D.*, April 25, p. 637.]

The Pharmaceutical Defence Union was briefly discussed, but in the absence of fuller particulars it was decided to hold the matter over to the next meeting.

## The "Entente."

THE Franco-British Exhibition at Shepherd's Bush, W., was opened by the Prince of Wales on Thursday, May 14, in a downpour of rain. The representatives of pharmacy whom we saw there were Mr. and Mrs. W. S. Glyn-Jones, Mr. and Mrs. Walter Hills, Dr. W. Harrison Martindale, and Mr. George E. Pearson (Burroughs Wellcome & Co.). So far as the exhibits are concerned the Exhibition will not be complete until early in June. It is notable that the only section really ready last week was that of British Chemical Industries, where we observed exhibits by the following firms or companies:

Anglo-American Pharmaceutical Co., Ltd.  
J. & A. A. Atkinson  
British Camphor Co., Ltd.  
Brunner, Mond & Co., Ltd.  
Burroughs Wellcome & Co.  
F. S. Cleaver & Co., Ltd.  
Erasmic Co., Ltd.  
John Gosnell & Son, Ltd.

Howards & Sons, Ltd.  
John Knight & Son, Ltd.  
W. Martindale  
May & Baker, Ltd.  
T. Morson & Son  
Parke's Drug Stores, Ltd.  
A. & F. Pears, Ltd.  
United Alkali Co., Ltd.

There are some others, and this whole section promises to be instructive if not fully representative of British chemical industries. The Exhibition as a whole vies with the last International Exhibition held in Paris, and although it does not cover the ground area of the great Colombian Exhibition held in Chicago in 1893, it is comparable with and superior to it in several respects. Architecturally it is a White City, such as has never before been created in London, and there will be much in the Arts and Industrial departments of the Exhibition to warrant a journey to London.

We hope to deal fully with the exhibits pertaining to chemistry, medicine, and pharmacy, when matters have advanced a little further.

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In MESSRS. HOWARDS & SONS' exhibit quinine salts are the leading feature, but medicinal and technical chemicals generally are included.

\* \* \*

One of the novelties of the Exhibition is the soap fountain of the Erasmic Co., Ltd., Warrington. This fountain blows a continuous supply of bubbles from two circular sprays. The bubbles are illuminated by a series of electric lamps changing colour from red to white.

\* \* \*

Messrs. Burroughs Wellcome & Co. have four distinct exhibits, namely: (1) General exhibit in the Chemical Industries Section; (2) Kepler malt-products exhibit in the Alimentation Section; (3) photographic exhibit in the Photography Section; (4) welfare work exhibit in the Social Economy Section of the British Liberal Arts Building. The Wellcome Chemical Research Laboratories are further represented by two distinct exhibits: (a) An exhibit in the Chemical Industries Section and (b) an exhibit in the Science Section.

\* \* \*

One of the quaintest exhibits is in the section devoted to British chemical industries. It is the shop of an old apothecary, designed by Dr. W. H. Martindale upon originals 150 years old, and carried out by a skilled carpenter so well that



it looks ancient. The shop is full of ancient and quaint things, besides the oldest prescription-books of Hopkin & Williams (founders of the retail business and predecessors of William Martindale) and many old Pharmacopœias, which we must reserve for a later report.

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A big crowd seen outside the main entrance to the Exhibition on Monday evening by a *C. & D.* correspondent was, on his investigation, found to be attracted by a particularly natty donkey-cart which is used for "Glaxo," the new food that builds bonnie bairns.



## Professor Attfield at "Ashlands," Watford, Herts.

THE Anglo-Saxon race of pharmacists has grown up on both sides of the Atlantic equally familiar with one name—"Attfield." To all it means a text-book which has helped them to facility in solving chemical problems, and to some on the American side of the Atlantic it means a man who came to the aid of Chicago pharmacy when the

the table lay the last number of the "Bulletin" of the American Pharmaceutical Association, recently consulted files of B.P. annotations and correspondence were near the writing-desk, and discarded advertisement-pages of the *C. & D.* and "P.J." indicated that the latest volumes were prepared for the binder. Over the door of the library hung a signed copy of the portrait of Professor Attfield by Sir Hubert von Herkomer, R.A., presented to each sub-



JOHN ATTFIELD, Ph.D., F.R.S., ETC.

fire-raid wiped out the educational equipment of pharmacy in the City of the Lakes. On this side we think of Dr. John Attfield, M.A., F.R.S., as a leader in pharmaceutical education, a propagandist of pharmaceutical fraternity, an editor of the *British Pharmacopœia*.

It is more chance than design that induces these reflections. A *C. & D.* representative found himself the other

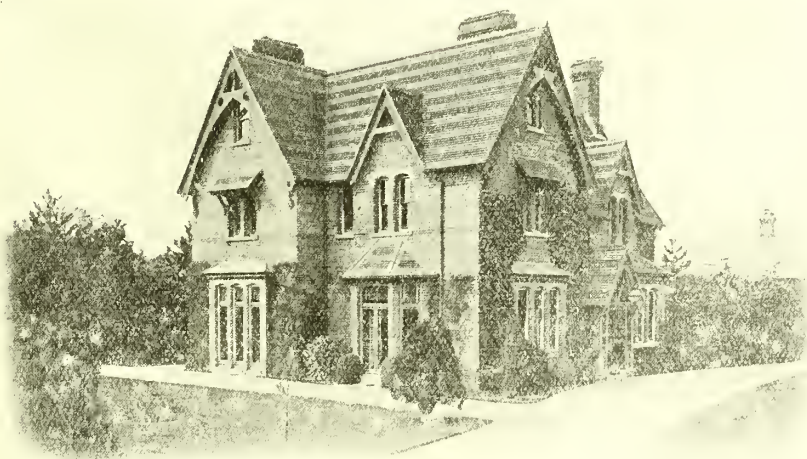


A CORNER OF THE "ASHLANDS" LIBRARY.

Shows the B.P.C. books presented to Professor Attfield.

scribe to the magnificent testimonial given to the Professor by his old students and scientific friends after his retirement in 1896 from thirty-four years of professorship.

We were handling some of the B.P.C. books when the Professor stepped in, seemingly as brisk as of yore, and immediately we were in the thick of an appreciation of the classic writers of England. The Professor confesses that when the B.P.C. allowed him (and Mrs. Attfield) to select the books they would like, and he got them all in serried



"ASHLANDS," WATFORD, HERTS.

day guiding a transatlantic *confrère* to Ashlands, Watford, where the veteran Professor has lived these past two-and-thirty years. They were shown into the veteran's library, one side of which is wholly occupied by a goodly bookcase filled with the volumes presented to John Attfield in 1880 by the members of the British Pharmaceutical Conference in testimony of his services to the body as Secretary from its foundation. All around the room were evidences of the Professor's living interest in pharmacy. On

rows, he despaired of ever reading them. But now—well they have been read many times. Lytton, Thackeray, Carlyle, Max Müller are ministering to the pleasures of a well-earned retirement, and, we hasten to add, current pharmaceutical literature is as diligently read as when the Professor was at 17 Bloomsbury Square.

It is two years since Dr. Attfield visited London. He has little occasion to do so, for he has mastered the problem of retirement, and finds within the four walls of Ashlands,

its delightful environment, and hosts of friends, all the pleasure and profit that a man who gave half a century of his life to pharmacy may be expected to enjoy. Recently an attack of neuritis has compelled him to realise that the absence of the hoary head (the Professor seems not to have a silver hair) is not necessarily a sign of youth, and he confines his exercise to the broad walks of Ashlands and an occasional drive in his victoria. The fact that a new suit of harness for his favourite horse is on order prophesies future activity in that direction.

But reflections on the past are not awanting. There was something of the former enthusiastic glow on his face when the improvement of the School of Pharmacy chemical laboratories was mentioned. "I am very pleased to know," said the Professor, "that the Council are determined to maintain the Society's reputation as a leader in pharmaceutical education irrespective of cost, and have no sympathy with the cry for—what shall I say?—well, cram is the word."

"Yes," said the transatlantic *confrère*, "some boys do want to get through somehow; they want to get on, Professor."

"True," he replied with some deliberation, "but 'thorough' it is that takes them furthest, and there are always some that you cannot teach too well."

And so we talked of the old problems in education and pharmaceutical equipment which John Attfield was preaching about when we were in pinafores. From the seclusion of the library we went out into the sunlight and the quiet of the garden—three times round make a mile. The fine lawn is hedged off from the kitchen garden, and that from the meadow, where a young pony grazed undisturbed. The Professor chatted cheerily of all things pharmaceutical, and even gave his guests a lesson or two in botany. He is no recluse nor a back number, and the following verse, written by Sir John Bowring, an old acquaintance met at the British Association, is the message which he sends to those who know him, whether in the New World or the Old:

*What is our duty here? To tend  
From good to better, thence to best;  
Grateful to drink Life's cup, then bend  
Unmurmuring to our bed of rest.*

## What is Nitrate-of-Mercury Ointment?

By R. C. COWLEY, Ph.C.

I HAD recently to examine an ointment produced and sold by an irregular physician, which had all the appearance of a variety of citrin ointment, but much to my surprise I was quite unable to detect any trace of nitric acid in it. As I was perfectly convinced that nitric acid had been used in its preparation, it occurred to me that the nitrate of mercury might be completely decomposed when added to the warm fats. This led me to examine the B.P. nitrate-of-mercury ointment, and here, again, the tests for the nitric radical gave negative results. On removing the fat with petroleum ether the residue had the appearance of an oleate of mercury, but as it was not entirely soluble in ether or alcohol I concluded it consisted of the mercury salts of oleic, stearic, and elaidic acids.

I cannot recall ever seeing the exact composition of this ointment stated, and I was always under the impression that when the cold solution of mercurous nitrate was poured into the hot fat the chemical action consisted in the oxidation of the mercurous into the mercuric nitrate, and a simultaneous polymerisation of the olein into elaidin. I believe this is usually held to be the chemical action. This view is undoubtedly incorrect. The B.P. ointment is acid, the acidity being due to the free acids in the fat, and not to nitric acid. In view of these statements it would be interesting to know in what respect the B.P. nitrate-of-mercury ointment can claim any advantage over the ointment of the oleate, which it practically is. It is also curious as an example of the perpetuation of a popular error which one does hit upon now and again in the British Pharmacopœia and other standard works. One's mind is instinctively carried back to the name given in the London Pharmacopœia

for oxide of mercury—viz., Hydrargyri Nitrico Oxidum—a name which one still may see in the old chemists' shops, and which was retained in the 1864 and 1867 British Pharmacopœias as a synonym.

## Medical Cleanings.

### Trypsin in Glycosuria.

TRYPSIN in 2-grain doses thrice daily, three hours after meals, has proved successful in the treatment of intermittent glycosuria.

### Calmette Ophthmo-tuberculin Reaction.

A MODIFICATION of this is now employed in Germany, an ointment composed of tuberculin, lanolin, and olive oil being used. Calmette reports favourable results in testing for typhoid fever, using a diluted typhoid serum as material for dropping in the eye.

### Sodium Citrate in Dyspepsia.

For dyspepsia in adults, accompanied by gastric pain and vomiting some hours after food, 20 grains of sodium citrate in half-an-ounce of water should be taken as soon as the symptoms commence, and repeated every five minutes until they cease. A total of 30 to 60 grains is usually successful.

### Antityphoid Inoculation.

A PAPER on this subject was read by Dr. R. Hingston Fox before the Association of Medical Officers of Missionary Societies. It is submitted ("B.M.J.," 1908, i., 2472) that antityphoid inoculation is shown to be a useful method of prevention of enteric fever and unattended with material risk. This assertion is based upon the report that among 10,220 troops in India, 21 per cent. of the non-inoculated suffered, as against 6.8 per cent. of the inoculated.

### Alkalies in Bronchial Catarrh.

DR. ALEXANDER HAIG ("B.M.J.," 1908, i., 1100), on the treatment of bronchial catarrh by alkalies, points out that it is only necessary to give alkali in sufficient dose to render the urine alkaline to cause an immediate fall of temperature and resolution of symptoms in many cases of bronchitis and broncho-pneumonia which are attributed to uric acid irritation. The amount of sodium bicarbonate necessary is 20 to 60 grains for a child and 90 to 120 grains for an adult in twenty-four hours; on no account should ammonium salts be given, since they raise the acidity, and even such flavouring matters as orange and sugar, which also tend to raise the acidity, are best left out.

### Treatment of Acne Vulgaris.

ACNE VULGARIS is distinguished by the presence of "blackheads" or comedones. The usual method of treatment is expression of the comedones, followed by bathing with hot water and soap, and then the application of sulphur ointment. Shelling pastes are largely used upon the Continent in obstinate cases, says "The Hospital." They give good results, but require care in application and the patient must be confined to the house for a week or more:

#### 1. UNNA'S SCHÄLPASTA.

Zinci oxidi	...	...	...	3iss.
Terræ siliceæ	...	...	...	gr. xv.
Ol. benzoin.	...	...	...	℥℥.
Adipem benzoin. ad	...	...	...	3ss.

10 to 50 per cent. of resorcin to be added.

The paste is applied twice daily for three or four days beginning with 10 per cent. resorcin, and increasing to 50 per cent. on the third or fourth day. During the rest of the week the superficial layers of the epidermis shell off. This may be repeated after some time.

#### 2. SCHWIMMER'S PASTA DECORTICANS.

Sulphur. præcip.	...	...	...	3j.
Beta-naphthol.	...	...	...	3j.
Sapo. virid.	...	...	...	3j.
Adipis præparat.	...	...	...	3iv.-3vj.

The paste is applied for several days in succession, washing off after one to two hours, and a dusting-powder then applied. Desquamation follows in a week or so.



## The Art of Dispensing.

[Observations by Mr. Harold Wyatt on the eighth edition, which may now be obtained from 42 Cannon Street, London, E.C.1. or from any wholesale house, price 6s. net, by post 6s. 4d.]

**A**FTER a careful examination of the contents of this revised and enlarged edition from cover to cover, one can only wonder at the mass of highly useful and specialised information the book holds in its 542 pages. To one who has handled the earlier editions from the book's genesis in the *C. & D. Diary* of 1880, the present volume appears not only fully to maintain the reputation earned by the former editions, but to stand as a monument exemplifying the progress and complexity of modern pharmacy. The essentially practical character of the book is revealed in every paragraph.

The charm of "The Art of Dispensing" to me has always been that in it one reads the most opposite views regarding manipulation, given by men whose names are household words in the world of pharmacy. One has only to read the opinions expressed, backed up as they undoubtedly are by daily practice, to arrive at the conclusion that if there is a business in which a man should avoid being dogmatical upon any point it is certainly that of the dispenser. A teacher or professor cannot help laying emphasis upon his ways of working, and after a time regards them as above discussion. Not so a practical dispenser, who, coming daily in contact with other men, finds they use methods the opposite to his pet notions, yet turn out an equally satisfactory preparation. The teaching aimed at in "The Art of Dispensing" is not that which consists in the stating of innumerable rules but rather that which relies upon the multitude of examples.

Glancing at the chapters on dispensing conveniences, pills and excipients, emulsions, solutions, nebule and vapores, there are many new paragraphs which strike the eye, while in the New Remedies I note 405 more references than the sixth edition contained, as well as some exceedingly useful items of information respecting the characters and ways of dispensing of these new introductions.

The table of quinine salts and their solubilities has been well overhauled, and that of the various incompatibilities also. A useful feature is the inclusion of many more foreign autograph prescriptions, particularly French, than have appeared in former editions. Under the heading French Prescriptions a remark is made on p. 396 that "pills are going out of fashion in France." This is perfectly true, and may be traced chiefly to the French highly-trained and scientific pharmacians trusting the dispensing to unqualified and uneducated dispensers who do not understand how to make a decent batch of pills. A French translation of "The Art of Dispensing" might work a similar improvement across the Channel to that we have seen in Great Britain in that respect during the last twenty years. The vocabulary of French and German terms used in prescriptions might be further enlarged with advantage.

Taking the volume as a whole it outstrips its predecessors in diversity of contents; it is thoroughly up-to-date.

## A Few Curiosities.

**A** PROVINCIAL subscriber sends for our inspection a few curiosities which have recently come into his possession. The first of these is a characteristic picture by Thomas Rowlandson, which our subscriber refers to as "The Chemist," but it is really "The Quack Doctor," from "The English Dance of Death," to which the author of "Dr. Syntax" contributed "metrical illustrations." Mr. Joseph Grego, in his work on "Rowlandson the Caricaturist," says in regard to this picture:

Apothecaries' Hall, it might reasonably be hinted by the satirists, was a likely spot for Death's visitation. In Rowlandson's print we find the grim foe, in the full exercise of his privileges, pounding away with fatal energy. An apothecary is dispensing various noxious drugs to a considerable crowd of patients, who are disfigured by various sufferings. They will not be kept waiting long, apparently, for behind a

curtain Death, grinning at himself with a satisfied air in a mirror, and surrounded by the seeds of mortality, is grinding slow poisons with a will, the motive-power of the situation, as an able assistant to the quacks whose master he knows himself to be.

It was rather rough on the Apothecaries of 1814 (when this work was published by R. Ackermann, 101 Strand)



I have a secret art to cure  
Each malady which men endure.

that Rowlandson should have selected one of their "halls" as the home of the quack doctor.

Among other curiosities are four cuttings from T. Boddely's "Bath Journal," of April 4, 1757. The first is an advertisement for a "Plaister and Specific Tincture for all persons afflicted with Cancers and White Swellings," which was to be obtained at the various printers (not chemists) mentioned. It was sold in "parcels, five for a crown, or twelve for half a guinea; a bottle of Tincture with each." In the century and a half which has since elapsed how many "cures" for cancer there have been! One of the announcements in the journal is by the Governors of the General Hospital at Bath, who were evidently very desirous of getting a successor to Mr. Morris, the apothecary, who had "performed the office from the foundation of the hospital to this day." What was wanted was a person duly qualified, a single man who would live in the hospital and "have no other business but what belongs to that house." Here is a quaint advertisement:

**T**O be Lett, an APARTMENT, consisting of a Dining-Room and large Clofet, a Bed-Chamber and large Clofet, with one or two Garrets, if required, a convenient Kitchen, Pantries, &c. Plenty of Spring Water, and Use of a Brew-House. — Enquire of

**WILLIAM STREET, Apothecary and Chemist,**  
At the Phoenix, next Door to the Three-Cups, in North-Gate-Street, BATH, who truly prepares and sells, Wholesale and Retail,

Drugs, Chemical and other Medicines, as cheap as in London.

**S**ells also, by Virtue of the King's Letters Patent, many Patent Medicines. Likewise various Sorts of curious Colours; Also many Sorts of Oils. Plaisters for Issues, spread on Linnen and on Paper; Orange and Orrice Pease for Issues. Mineral Waters in great Perfection. Sea-Water and Tar-Water. Cheltenham purging Salt.

\* A LAD with a good Character, that has lived in an Apothecary's Shop, may hear of a Place at the said WILLIAM STREET'S.

It is interesting to note that "Advertisements for this Journal (which is one of the most Extensive Country Papers in the Kingdom) are Taken-in, as usual, by (amongst others) Mr. Newbery, in St. Paul's Churchyard, London"; also that "At the Printing-Office of the late T. Boddely are sold Dr. Henry's Medicine; Hypo Drops; Turlington's Balsam; Daffey's, Bostock's, Squire's, Ratcliff's, & Stoughton's Elixirs; Bateman's Drops; Greenough's Tinctures for the Teeth; Eton's Syptic; British Oil; & all other Patent Medicines, as usual."

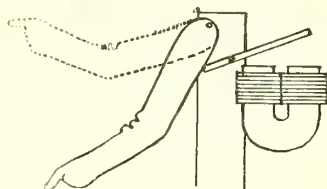
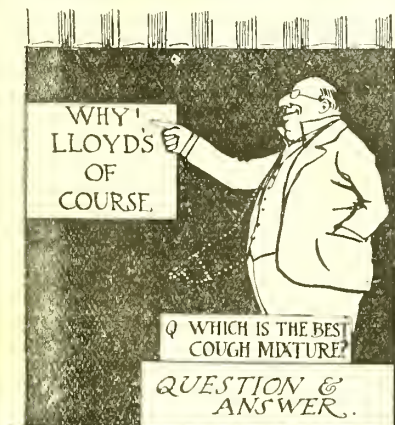
THE IMPORTS of pharmaceutical and chemical products into the Morea during 1907 amounted in value to 270,000*l*.



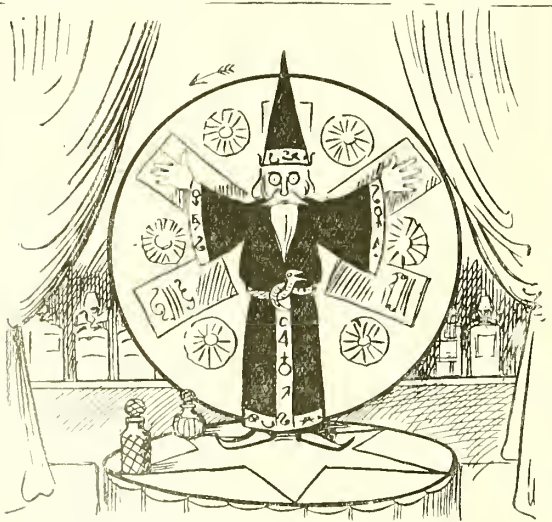
## Mechanical Window-displays.

By E. DANGERFIELD.

**D**URING the winter season I installed a neat and attractive advertisement for our Oxymel, Horehound, and Linseed Cough-mixture. In this the window-pane is blocked by cartons, with the exception of a rectangular space (about 15 in. by 15 in.) in the centre. In this space appears first a card bearing the inscription "Question and Answer."



wires being necessary; and for the return circuit the gas-pipe is used. For a Christmas window I designed an elaborate alchemist, or magician, with outstretched wand, who slowly revolved and pointed to bottles of perfumes, etc. He looked like this:



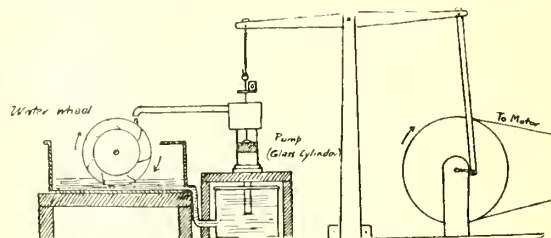
The method of construction was as follows:

Upon an 18-in. disc covered with dark velvet was a "pentacle" lined in with pipeclay. At each point was a cut-glass smelling-bottle, and in the central space stood a mediæval magician. He was attired in a long black gaberdine relieved by the conventional bordering of astro-nomical signs, wore a very tall conical hat, and was about a foot in height. At the back (motor-driven) was another

18-in. disc, revolving vertically, upon which were Christmas perfume-boxes (empty) and scarlet bottle caps opened as rosettes, with a large central one. The novelty of the show was in the eyes of the "Magician." These were glass "marbles" from defunct S.W. bottles. The face, as usual, was moulded upon a poppyhead, the back of which was cut away. Thus a weird and curious effect was produced: as the disc revolved, a miniature moving picture of it was seen in each of the eyes, especially distinct when lighted up at night. The pentacle was a star-shaped design of five points, enclosed by a circle, and was one of the "stage properties" of the Rosicrucians.

Had time permitted I should have carried out this "wizards" idea much more completely with a prepossessing assortment of hobgoblins, succubi, diabolins, etc., with a "ween o' lang-nabbit worricowrie." The rest of the window was filled with Christmas perfumes of the "Prizetta" and other patterns, the whole making one of the prettiest "shows" I have ever produced.

During the brilliant weather last summer I ventured on a "watery" window. All the simple mechanical details are explained by the sketch. The metalwork was enamelled sealing-wax red, and the woodwork was stained black. The public were pleased with the beam "going up and down



and the wheels going round." The model was flanked by the immense dummies provided by the Hunyadi Co., and in front was a row of dummy syphons from a well-known firm. The inscription was: "Model of pumping-engine at —. Depth of artesian well, 795 ft. 1 3/4 in."

## Business Hints.

### The Future of the Retailer.

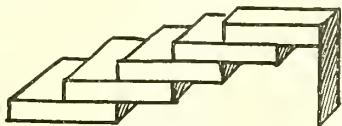
MR. NEIL C. POLSON, Ph.C., of Kingston, Ont., who has been visiting Europe on business purposes (he and his sons are wholesalers), sailed for Montreal this week. During his visit Mr. Polson has made a careful study of drug-trade conditions in England and in France and Germany, and we had the opportunity on several occasions of conversation with him. Mr. Polson was impressed with the fact, which is also beginning to show itself in Canada, that modern changes in medical treatment are influencing the nature of the stocks of pharmacies and drug-stores. Side-lines, especially toilet-goods of all kinds, he considers to be the direct outcome of the development of sanitation, preventive medicine, and the newer medical treatment. These, he considers, have reduced the demand for physic, while the old-fashioned household remedies have been largely replaced by specialities and patent medicines. These factors have compelled pharmacists and druggists to look for new goods to sell; and it is clear from the displays in drug-stores in England and on the Continent that sundries have saved the situation for those who have room for them. Mr. Polson emphasised this last point strongly, saying in effect, "Where you have a chemist with comparatively small premises, he has not been able to develop in the sundries line as he should. A Boots store succeeds in this direction because the company's shops are spacious and give room for display; that is essential, and it is where Canadian druggists have the advantage. Their shops are roomy, and they will be able to show goods without increased rental." Mr. Polson has not come to this conclusion without full consideration, and he justifies it from thirty-six years' experience in Kingston, which shows a decreasing demand for drugs, and an increasing difficulty of keeping up the returns without resorting to side-lines which are not even indirectly pharmaceutical. All that has



to do with the toilet is, he considers, a legitimate accompaniment to hair-lotions, dentifrices, and perfumes. It may be that in the future specialising in dispensing will again take place, so that the true pharmacist will be differentiated from the drug-store; but that, said Mr. Polson, is a speculation beyond the question of the hour. How can returns be kept up? The best answer to that is, Study what the drug-stores are doing.

#### A Home-made Show-stand.

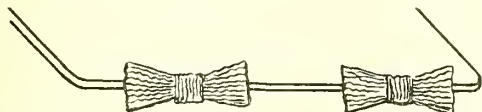
GET three-tablet soap-boxes and glue them in "steps" as high as you like. Then at each end and at the back glue



strong card cut out at ends in steps to correspond. Then glue on these steps old-gold or moss-green sateen, velvet, or plush. The result is very effective for showing cut-glass bottles, bottles of perfume, puffs, or back-combs—in fact, nearly everything—and they can easily be re-covered.

#### Window Decorations.

THE edges of glass shelves look well (in a perfume display)



with a large bow of crinkled paper. Fix two on each rim of the glass shelf, as in the sketch.

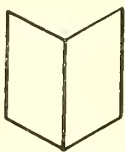
Shade electric lamps now and then with crinkled shades,



the colour suitable to the goods shown. Only shade the half looking towards the street.

Combs look well displayed on old cards over which old-gold sateen has been stretched and glued at the back. Bore small holes through the card at the proper intervals, pass very fine wire through the holes after passing through the teeth of the comb at each end. When through, bend in opposite directions, or twist round a match.

All goods shown slanting are better seen than when standing upright. Melt glue and get a piece of old card. Glue



the back of the left-side half and press it against the back of the carded goods. The right-side half is the slant and should be cut at the bottom to the slant required.

Here is another home-made easel for carded small



articles. Get an old postcard, double it, and cut it to the shape figured. When open it looks like the second drawing.

## Photographic Notes.

(By a Pharmaceutical Camerist.)

### The Treatment of Over-printed P.O.P.

THOSE chemists who make their own picture-postcards will find the following hint of value. It comes from "Focus." In the case of postcards considerably over-printed they should be fixed and immersed in an old much-used hypo alum bath. The result after an hour or two is a good purple colour of marketable density. Only those who make P.O.P. postcards can appreciate the saving thus made.

### The Purification of Chrome Alum.

"DIE PHOTOGRAPHISCHE INDUSTRIE" gives the following process for the abstraction of the sulphuric acid contained in commercial chrome alum:

Take 1 kilogramme of the powdered salt; place it in an 8-litre flask and cover with 2 litres of spirit. The mixture is allowed to stand, with occasional agitation, for about fifteen minutes, and is then filtered. The alum remaining on the filter is washed once or twice with spirit and dried.

### The Krayn Line-plate

will, it appears, soon be a commercial commodity. Herr Krayn's patent figures in the "complete specification" list of the week, and a company was recently formed in Berlin to exploit the process. The plate is coated with a pan-chromatic emulsion underlaid by a line screen made by cutting thin sections of a block composed of sheets of celluloid stained with the three primary colours superimposed. When the inventor first demonstrated his process last November he stated that he had been able to get sections of the screen of a thickness of 6.5 to a millimetre or about 165 to an inch. It is to be hoped for the sake of the practicability of the process, that a means has been found of getting a much thinner section than this, otherwise the "grain" of the plate will be too obvious for really serious work. Herr Krayn calls his screen a "line reticule."

### The Alteration of Focus by Screens.

ALL workers with autochrome plates know that the autochrome plate is reversed in the carrier, and that the photograph is taken through the back of the plate. As Messrs. Lumière point out in their instructions, the alteration of focus brought about by this reversal is corrected by placing the colour filter behind the lens. Dr. Lindsay Johnson has been making some experiments with colour filters with a view to finding out what alteration of focus is caused by the use of the screen before and behind the lens. The matter is treated by him in the "Photographic Journal." He comes to the conclusion that using a thin colour filter, say, of  $1\frac{1}{2}$  to  $2\frac{1}{2}$  mm. in thickness, no correction is necessary. Dr. Johnson finds that the position of the autochrome screen behind the lens is not sufficient to correct the reversal. This is rather curious, and it is rather difficult to see how Dr. Johnson could arrive at such a conclusion, as the screen is made of a certain thickness for this particular purpose.

### A Modified Farmer's Reducer.

MR. C. WELBORNE PIPER contributes a valuable article to the "British Journal of Photography" on sulphide toning and a new reducer. Mr. Piper points out that a sulphide-toned print will give a weak result when the print contains traces of hypo—a fact which no doubt most photographers have discovered for themselves. The lesson taught by this fact, however, has, so far as I am aware, not been learnt before—that is, that the addition of bromide (as in the ferricyanide bleacher) to the ferricyanide in Howard Farmer's reducer would naturally affect the nature of the action of the reducing solution. Mr. Piper recommends the mixing of equal parts of 10 per cent. solutions of potassium bromide and potassium ferricyanide, and the addition of a "few drops" of the mixture to every 2 oz. of hypo solution. A reducer made thus acts very regularly and steadily, and does not eat out the fine detail, as is the case with ordinary Farmer's reducer. It is hinted that this reducer might take the place of ammonium persulphate, although, as the author points out, it would require photometric tests to ascertain whether the actions of these two reducers are identical.

## Trade Report.

**NOTICE TO BUYERS.**—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., May 21.

**B**USINESS shows signs of an improvement in many directions this week, and the tone is not so depressed as usual. There are no outstanding features to be recorded, although price-alterations are fairly numerous. Cocaine is strong and dearer, quinine is steady and in small consumptive demand; acetylo-salicylic acid is lower. Soda tart. and pulv. seidlitz are also lower. Strychnine is easier. Opium is still tending downwards. Balsam, Canada, is dearer, and ipecac. on small stocks is tending upwards. Castor oil and Jamaica ginger are lower. Shellac has advanced. Menthol is in fair inquiry, and American peppermint oil is tending downwards. The principal fluctuations of the week are as follows:

Higher	Firmer	Easier	Lower
Balsam, Canada	Benzoin (Sum.)	Ammonia sulphate	Acid, acetylo-salicylic
Cardamons	Bergamot oil	Benzols	Castor oil
Cocaine	Cod-liver oil	Opium	Ginger (Jam.)
Dragon's blood	Honey	Orange oil	Pulv. seidlitz
Ipecacuanha	Sarsaparilla	Palm oil	Rhubarb
Shellac	(Native)	Potash pruss.	Soda tart.
Wax, bees' (Jam.)		Strychnine	

### Cablegrams.

**BERGEN, May 20:**—The cod-fishing at Finmarken continues fair, but the market for finest non-congealing Lofoten oil has a firmer tendency at the unaltered quotation of 52s. per barrel f.o.b. Bergen.

**NEW YORK, May 21:**—Business in drugs is quiet. Opium has been reduced to \$4.50 per lb. for druggists' by single cases. Refined camphor has declined by 5c. for American in barrels. Hydrastis (golden seal) has an easy tone at \$1.90. Cartagena ipecacuanha is steady at 95c. per lb. Cascara sagrada is nominal at 6½c. Jalap is steady at 18c. Peppermint oil is dull at \$1.55 per lb. in tins, and oil of birch is lower at \$1.90 per lb.

### Java Cinchona and Quinine.

In the annual report on the trade of Java during 1907 the British Consul states that notwithstanding the fact that the demand for quinine last year was good, the prices obtained in European markets were extremely low, and makers must certainly regard the year as an unsatisfactory one. Exports of bark were larger than ever, the figures being 8,540 tons, against 6,565 tons in 1906; but it must not be lost sight of that at the end of 1906 a considerable quantity was held over for export during 1907. The quinine disposed of at auction and by private sales in Batavia during the past four years was as follows: 1907, 1,205,042 oz. (average price, 6½d. per oz.); 1906, 916,561 oz. (7½d.); 1905, 534,400 oz. (9½d.); and 1904, 821,608 oz. (9½d.). The exports of quinine from Java during 1907 amounted to 738,400 oz., against 762,400 oz. in 1906 and 748,800 oz. in 1905. Large quinine contracts were again closed with the Italian Government, whose method for combating malarial fever is being followed by the Netherlands Indian Government.

### Heavy Chemicals.

Although there is a moderate demand in the heavy-chemical market for both main and miscellaneous products, business cannot be described as being other than disappointing and on the quiet side. Deliveries against existing contracts are somewhat slack as well as new business. In spite of all, however, values rule on the whole fairly steady, and with con-

tinued high cost of fuel and raw materials generally are likely to remain so.

**SULPHATE OF AMMONIA** is an easier market, and late values have hardly been maintained. There is really very little demand either for prompt or forward delivery, the greater part of this month's requirements having been already covered. Present values are nominally as follows: Beckton, prompt, 12l. 10s.; Beckton terms, 12l. 7s. 6d.; London, 12l. 6s. 3d. to 12l. 7s. 6d.; Leith, prompt delivery, 12l. 10s., and July-December delivery, 12l. 7s. 6d.; Hull, 12l. 6s. 3d. to 12l. 7s. 6d.

**BICHROMATES OF POTASH AND SODA** are in fairly steady request at recently reduced rates. Bichromate of potash, English and Scotch deliveries, 3½d. per lb., less 7½ per cent., and export 3½d. per lb. net, f.o.b. Glasgow. Bichromate of soda, English and Scotch deliveries, 3d. per lb., less 7½ per cent., and export 2½ per lb. net, f.o.b. Glasgow.

**BENZOLS** of both grades and at all centres are very quiet. nominal values are: 90-per-cent., 7½d. to 8d. per gal., and 50-per-cent., 7½d. to 7¾d. per gal.

**RECOVERED SULPHUR** continues to move steadily and is fairly firm at 4l. 17s. 6d. to 5l. per ton in bags free on rails.

**ZINC SALTS** show no appreciable change, and are moving fairly well: Zinc sulphate crystals, 6l. 15s. to 7l. per ton, and zinc chloride solution, 100° Tw., 6l. 2s. 6d. to 6l. 7s. 6d. per ton.

**MAGNESIUM SALTS** are in steady consumptive demand at late rates. Sulphate, 60s. to 62s. 6d. per ton; chloride, 67s. 6d. to 70s. per ton; and carbonate, 37s. 6d. to 40s. per cwt.

### Alpes Maritimes Crops.

(By the "C. & D." Correspondent.)

Grasse, May 13.

**ORANGE-FLOWERS.**—Distillation commenced several days ago in the Grasse factories, but up to date only small quantities have been dealt with. The crop will be at its height during the week, and enormous quantities will be gathered, unless rain sets in. Although prices for the flowers will be lower, the reduction will not be important enough to warrant cheaper prices for the neroli oil, as the stocks of this product are very low. Altogether the crop will be much the same as last year in the Vallauris, the Golfe-Juan, the Antibes, La Gaudie, La Colle, St. Jeannet, and the Cannes districts. In the Bar-sur-Loup district the growers are far from satisfied. However remunerative prices may be this year results will still be inadequate, since the crop in the district has been exceedingly poor. In 1907, 1,254,526 kilos. of flowers was received by the Co-operative Society of Orange-growers in the Maritime Alps.

**ROSES** are late on account of the cold weather. Some factories have already received small consignments, but no definite conclusions as to prices and quantities are yet available.

**MIGNONETTE.**—This crop also begins in May, but, like all the other flower-crops, it is late on account of the cold weather, and nothing can be said for the next two or three weeks.

### American Drug-market.

New York, May 12.

Business in drugs continues of a quiet, discouraging nature. Orders seldom exceed jobbing limits, and the total volume for the week makes a pretty poor showing. Canada balsam and guarana are dearer; opium is notably unchanged.

**ALOES.**—Shipments of Curaçao in boxes for this market have been rather heavy recently, and the market continues in easy tendency; 7c. to 8c. is the usual range of prices, but 6½c. can be done in some quarters. Gourds are easy at 9c. Cape is comparatively steady at 8c.

**CANADA BALSAM.**—Owing to the continued scarcity, both on spot and at primary sources, the local market has scored an advance of 90c. per gal. to \$5 for barrel lots, at which figure genuine product is held under close control. Less desirable goods are offered at lower prices. Oregon is unchanged and easy at \$1.20.

**CASCARA SAGRADA.**—Owing to the disposal of the London bankrupt stock the situation is regarded by holders in a little more favourable light, but such has not so far dawned upon consumers. Demand continues slow, the impression prevailing that a season of low prices is in store. Meanwhile open quotations may be repeated as 6½c.

**COPAIBA.**—A fair volume of business was transacted during the week, mostly in the better grades of C. and S. American, for which 50c. to 60c. was easily obtained. Para moved quietly at unchanged prices.

**GUARANA** has been the subject of some inquiry, and, taking advantage of the scarcity at primary sources, the few local holders advanced prices to \$2.50 for high-grade drug.

**HYDRASTIS.**—Demand is not particularly brisk, but prices are fairly steady at \$1.90 to \$2.00. Small parcels can, however, be picked up here and there in the country at a slightly lower figure.

**OPIMUM.**—Prices have not altered during the week, and



several cases were reported sold at \$4.55. The effects of the reported damage to crops have somewhat worn off, however, and the market outlook is now considered rather less favourable.

**PEPPERMINT OIL (AMERICAN).**—The position on spot is practically unchanged; business in "tin" oil continues light, and the market is easy at \$1.55 for quantities, while the movement in packed goods is principally for foreign account at prices in accordance with the get-up of the package and reputation of seller. The weather continues suitable for the development of the Western mint-crops, and a good yield is expected.

**SASSAFRAS BARK** is finding a steady outlet at 12c. to 14c., according to grade and quantity desired.

**SARSAPARILLA.**—Mexican is following a routine course, with prices nominally steady at 7c. to 7½c.

**SENEGA (WESTERN).**—Dull and lower at 43c.

**SPERMINT OIL.**—Very little business is passing, but prices for the limited supply are firm at \$7.50 to \$7.75. In order to meet the unusual demand larger areas have been reserved for spearmint-growing. New crop oil for August delivery is reported available at \$4.50.

**TOLU BALSAM.**—Business has fallen off considerably, and, under heavy receipts from primary sources, the market continues easy at 21c.

### London Markets.

**ACID, ACETYLO-SALICYLIC.**—Owing to competition by a maker "outside" the Convention, prices have been revised, whereby the minimum lots of one ton show a reduction of 1d. per lb. to 2s., but on small lots no alteration has been made.

**ACID, CITRIC,** is firm and unaltered, with a fair inquiry at 1s. 4d. for English and 1s. 3½d. for foreign.

**ACID, TARTARIC,** is steady at the unchanged rates of 10¾d. for English and 10¾d. for foreign.

**ANISEED.**—Russian is quoted 21s. 6d. to 22s. 6d. per cwt., according to quality, but no business has been reported.

**ARROWROOT.**—At auction 74 barrels of St. Vincent offered and sold partly without reserve at from 1½d. to 2½d. for ordinary to fair manufacturing quality. Twenty boxes of good Natal were bought in at 4½d. per lb.

**BALSAM COPAIBA.**—Fourteen barrels have arrived in Liverpool from Maranham.

**BENZOLS** are easier at 7¾d. per gal. for 50 per cent. and 8d. for 90 per cent. on spot for prompt delivery.

**CAMPHOR, CRUDE.**—The market for China crude continues slow, with small sales on the spot at 150s., and with sellers for shipment at from 145s. to 147s. 6d. per cwt. c.i.f. terms.

**CANARY-SEED** continues depressed, but quotations are nominally unaltered at 31s. per quarter for clean La Plata, 32s. for Turkish, 32s. to 33s. for Morocco, and 60s. to 70s. for Spanish.

**CARAWAY-SEED** is firm at 42s. to 43s. per cwt. for fair to good Dutch on the spot.

**CINCHONA.**—At the auction of cinchona held in London on Tuesday 366 packages only were offered, of which practically all sold at and after the sale at the unchanged unit of ¾d. per lb., the druggists' barks especially realising full prices.

The following were the quantities of bark offered and sold:

	Packages Offered	Packages Sold
Ceylon cinchona...	211 of which	£2
African cinchona...	127	127
East Indian cinchona...	37	37
	375	256

The following table shows the approximate quantity of bark purchased by the principal buyers:

	Lb.
Agents for the Frankfort & Stuttgart factories	9,066
Messrs. Howards & Sons, Ltd. ...	8,390
Agents for the American factories ...	3,168
Agents for the Mannheim factory ...	1,190
Druggists ...	16,140

Total quantity sold	37,954
Bought in ...	26,794

Total quantity offered ... 64,748

The prices paid were as follows: AFRICAN: druggists' quill, rather poor appearance, 5d. to 5½d., and good quillings and

chips 3½d. to 4½d. per lb. CEYLON: Ledgeriana chips and shavings 4½d., hybrid stem ditto 2½d., and dust 1½d. Succirubra stem chips and shavings; 3d. per lb. EAST INDIAN: Succirubra, good original shavings 5½d., original stem chips 2d. Officialis chips and shavings 3d., root 1d. Ledgeriana chips 1½d. to 1¾d., and root 2½d. per lb.

The shipments from Java to Europe during the first half of May amounted to 831,000 Amst. lb., against 654,000 Amst. lb. for the corresponding period of 1907. In the drug-auction four bales of nondescript quill of musty flavour from Guayaquil realised 6½d. per lb. The auction to be held at Amsterdam on June 11 will consist of 6,607 packages Ledgeriana and hybrid, 614 bales and 522 cases Succirubra, or 7,743 packages altogether; 92 packages coca-leaves will also be offered.

**COCAINE.**—The market is very firm, and with a good inquiry a further advance has been made in hydrochloride, the prices of which now range from 7s. 9d. to 8s. per oz., these quotations being for delivery from September onwards, while it is also stated that makers require from four to five weeks to deliver on present contracts. In second-hands a little might be had at about 7s. 6d., but prompt is very scarce, and holders do not wish to commit themselves in view of the long delay in obtaining delivery ex contract.

**COCOA-BUTTER.**—The auction to be held at Amsterdam on June 2 will consist of 65 tons Van Houten's, 7½ tons de Jong, 11½ tons Suchard, and 5 tons Mignon.

**CORIANDER-SEED** sells slowly at 9s. 6d. per cwt. for ordinary Morocco, but good quality is held for 10s. per cwt.

**CUMIN-SEED.**—Morocco has been sold at 32s. 6d. to 35s. per cwt. Malta is quoted at 40s. to 42s. 6d. per cwt.

**DILL-SEED** is offering at 13s. 3d. per cwt.

**ERGOT.**—It is stated that large American orders have practically cleared the Hamburg market of Russian and Spanish, and nothing is now obtainable in primary markets at the recent low prices.

**FENUGREEK-SEED** is firm at 9s. 6d. to 10s. per cwt. for ordinary to good Morocco.

**GINGER.**—At auction about 700 packages of Jamaica were offered and met with a slow sale, about 500 packages selling at and since the sales, at a decline of from 1s. to 2s., the following prices being paid: Common, 51s.; fair to good, common, 56s. to 62s. 6d., and good, 76s. to 80s. per cwt. A moderate quantity of Cochin and Calicut was offered, of which 80 bags sold, including D rough Calicut at 34s. Washed Cochin was bought in at from 37s. to 38s.

**GURJUN BALSAM.**—Bright filtered sells at 6d. per lb. c.i.f. terms.

**IRON SULPHATE** is extremely scarce on the spot, the quotation being nominal at 55s. per ton.

**JALAP.**—Some recent arrivals at Hamburg were purchased by manufacturers, as much as the equivalent of 1s. 1d. c.i.f. being paid for drug testing 11½ per cent. resin.

**LINSEED** is unchanged. Good qualities are quoted 45s. to 50s. per quarter.

**LYCOPodium.**—Russian is offered at 1s. 7d. per lb. c.i.f.

**MASTICH.**—Good pale tear of the new crop is offered at from 2s. 1d. to 2s. 2d. per lb.

**MILK SUGAR.**—The present prices, which are the lowest on record, are considered to be worth attention, and the fact that they are now at a point that will interest the American buyer may eventually have the effect of improving the market.

**OIL, BERGAMOT.**—Cables quote higher prices—viz., 13s. 3d. to 13s. 6d. per lb. c.i.f.

**OIL, CASTOR,** is lower. Hull make is quoted 22l. 15s. for firsts for prompt, and 23l. for June-December, while second-pressing is 20l. 15s. and 21l. 10s. per ton respectively, ex wharf London. Medicinal Italian is quoted 39l. to 40l. per ton ex wharf London net; and finest medicinal French at 30l., first-pressing at 28l. 10s., and seconds at 27l. 10s. per ton ex wharf London.

**OIL, COD-LIVER.**—Our Bergen correspondent writes on May 18 that during the past week the Finmarken fishing was again better, and, in spite of stormy weather and scarcity of bait, nearly two million cods were caught, with

a yield of nearly 1,400 barrels cod-liver oil. The total output of all the cod fisheries up to May 18 is as follows :

	1908	1907	1906
Cod (millions) ... ..	40	42.1	39.2
Cod-liver oil (brls.) ... ..	44,410	33,500	31,403
Liver for "raw" oils (hect.)	21,600	17,500	13,000

The market continues quiet, but with a rather firm tendency at previous quotation of 52s. per barrel f.o.b. Bergen for finest noncongealing Lofoten cod-liver oil. The exports from Bergen up to date amount to 6,541 barrels, against 3,321 barrels at the corresponding date of last year.

**OIL, OLIVE.**—According to the report of Mr. Fredk. Boehm, the season is now sufficiently advanced to form some opinion as to the coming crop, but he is afraid the prospects for the coming season will be disappointing. This is particularly the case in Spain, and considering that Spain is the largest olive-oil-producing country in the world, all other markets must follow. Owing to the good prices realised this season in Spain for common lubricating oils, the farmers have not taken the trouble to produce any edible oils, so that importers are required to draw their requirements from the Ionian Islands and the Levant; but in both these countries the stock is already considerably reduced and prices are steadily advancing. The present moment is regarded as favourable for covering requirements up to the end of the year, as it has been found that after August prices invariably advance.

**OIL, PEPPERMINT.**—American Wayne County oil continues extremely quiet, with sellers at 6s. 4d. per lb. c.i.f.

**OPIMUM.**—A Smyrna correspondent writes on May 9 that the beneficial rains everywhere have exercised a material influence on weak sellers, who have also yielded to the pressure put upon them by the bankers, and in consequence 68 cases changed hands at easier prices, comprising 50 cases Karahissar at the equivalent of 13s., two cases extra Yerli at 14s. 6d., 13 cases Adette at 12s. 2d., and two cases at 12s. 5d. per lb. c.i.f. European ports. Of the foregoing 61 cases were for the United States, and the remainder for Europe. If the demand continues holders will be inclined to sell part of their stock at current quotations in spite of the attitude of the large dealers, who persist in their refusal to sell in the hope that prices may advance again. If nothing unforeseen occurs holders will continue to sell at the above prices, and even lower if there is no great demand. A further advice from Smyrna dated May 16 states that the market is still influenced by the pressure exercised by the banks, who insist on a margin or on the immediate sale of the material to the highest bidder. The favourable reports of the new crop also tend to reduce holders' claims. The latter have been forced to sell 27 cases for America at 11s. 7d. to 11s. 9d. per lb. c.i.f. for Adette quality. It is therefore possible that manufacturing qualities will shortly be available at round about 10s. 9d. to 11s. 6d. as to quality. Large holders will not sell until it is ascertained what the crop is going to be. In London the market remains very dull, the retail business being mostly for export; 12s. 6d. is the nominal price for good Smyrna druggist's.

**PALE OIL** has declined 6d. to 25s. 6d. spot for Lagos.

**POTASH PRUSSATE** is easier at from 5½d. to 5¾d. per lb. for foreign yellow. Soda is unaltered at 3½d.

**QUININE** is a firm market, with a small consumptive inquiry, second-hand holders asking 7¾d. for B. and S. and/or Brunswick, but it would not be possible to buy new make at this price.

**SEIDLITZ-POWDER.**—The makers have reduced their price to 62s. 6d. per cwt. in 5-cwt. casks, and to 64s. 9d. in 28-lb. parcels.

**SHELLAC.**—With a decline of Rs. 3 in the Calcutta price of TN, the market for "futures" closed last week at a decline of 5s. from the best, small sales of August being made at 107s.; but this week there has been a substantial recovery, August having sold up to 115s. and October up to 118s., a large business having been done. On the spot TN orange has been sold at from 107s. 6d. to 112s., as to quality, and the sales for arrival include TN near at hand and May-June shipment at 107s. to 110s. c.i.f.; A. C.

Garnet has also been sold at 95s. for April-May and at 97s. 6d. c.i.f. for May-June shipment.

**SODA TARTARATE.**—The makers have reduced their quotations to 74s. per cwt. in 5-cwt. casks, and to 77s. in 28-lb. lots.

**STRYCHNINE.**—One of the foreign makers has reduced his price ½d. per oz., to 1s. 7½d., for large contract quantities.

**SUGAR.**—It is not anticipated that there will be any substantial changes in the prices of preparations into which sugar enters, as the value of that product has been in upward tendency for some time past. At any rate, prices of such articles as caramel, liquorice-powder, syrups, etc., are likely to remain as they are for another month at least.

**TARAXACUM.**—Foreign of fair quality is offered at from 50s. to 55s. per cwt. c.i.f., according to quantity.

**TURMERIC.**—Privately Madras is slow of sale at from 19s. 6d. to 22s. per cwt. Cochin split bulbs are worth 13s., at which small sales have been made, and Bengal is quiet at from 19s. to 19s. 6d. In the drug-auction 20 bags of fair bright Madras finger sold at 21s.

### London Drug-Auctions.

More animation than usual characterised the sale of new goods to-day, and a moderate proportion of the offerings found buyers at generally rather better prices. Cape aloes brought fully previous rates, especially for medium, and for Zanzibar in skins high prices were paid; buchu-leaves hang fire; Sumatra benzoin is irregular, but rather higher for the middling grades, while good qualities were full up. Cardamoms were in active demand at an advance of 1d. to 2d. all round. Ceylon coca-leaves were steady; dragon's-blood of fine quality, being extremely scarce, realised an advance; gamboge is quiet, but firmly held; new Jamaica honey sold well at full prices; ipecacuanha is firm and tending upwards. Myrrh is slow; essential oils were quiet. Rhubarb is tending lower in view of the new crop. Native sarsaparilla, the only description offered, sold at an advance of 1d. Tinnevely senna is extremely scarce, and wanted. Madagascar and Jamaica beeswax advanced 2s. 6d. per cwt. The following table shows the amount of goods offered and sold:

Offered		Sold		Offered		Sold	
Albumen .....	2	...	0	Myrrh .....	43	...	0
Aloes—				Oil—			
Cape .....	56	...	56	cassia .....	10	...	0
Socotrine .....	10	...	0	castor .....	10	...	0
Zanibar .....	8	...	8	clove .....	2	...	0
Ambergris (tin) ...	1	...	0	eucalyptus .....	45	...	*15
Anatto-seed .....	12	...	0	lavender (w. qt.)	12	...	0
Area .....	58	...	0	lemongrass .....	10	...	0
Balsam—				olive .....	2	...	0
peru .....	3	...	1	patchouli .....	21	...	6
tolu .....	18	...	1	Olibanum .....	10	...	0
Beans (Madag.) ...	73	...	0	Orange-peel .....	15	...	6
Benzoin Sumatra ..	80	...	60	Pepper, long .....	5	...	5
Buchu .....	18	...	*2	Rhubarb (China)...	50	...	41
Camphor .....				"Roots" .....	14	...	0
(Jap. tabs.) .....	18	...	5	Sandarac .....	6	...	0
Cannabis indica ..				Sarsaparilla—			
(E. African) .....	17	...	0	Native .....	14	...	14
Cardamoms .....	180	...	170	Scablae .....	4	...	0
Cascara sagrada ...	195	...	0	Scammony root ...	2	...	2
Cashew-nuts .....	6½	...	5	Seedlac .....	12	...	0
Cinchona .....	4	...	4	Senna and pods—			
Coca-leaves .....	22	...	22	Alex. .....	25	...	0
Cus cus .....	19	...	0	Mecca .....	8	...	0
Cuttle fish-bone ...	9	...	0	Tinnevely .....	100	...	100
Dragon's-blood ...	1	...	1	Squill .....	37	...	37
Galls .....	2	...	2	Sticklac .....	66	...	0
Gamboge .....	20	...	2	Tamarinds .....	136	...	5
Guaiacum .....	4	...	4	Tonka-beans .....	2	...	0
Gum arabic .....	18	...	12	Turmeric .....	330	...	20
Honey—				Turtle, dried .....	4	...	0
California .....	20	...	0	Wax (bees')—			
Jamaica .....	322	...	322	Australian .....	10	...	7
Ipecacuanha—				East African .....	1	...	0
Matto Grosso ...	3	...	3	East Indian .....	5	...	0
Mms .....	5	...	5	Jamaica .....	22	...	17
Kamala .....	2	...	0	Madagascar .....	179	...	179
Kino .....	1	...	0	Morocco .....	12	...	0
Lime-juice .....	55	...	0	Mozambique .....	53	...	53
Liquorice-root ...	3	...	3	West Ind. ....	1	...	1

\* Sold privately.



**ALOES.**—Fully steady prices were paid for the 56 packages Cape aloes offered, especially for the common qualities. Mossel Bay sold on usual 20 per cent. tares, comprising fair to good bright hard at 35s. 6d. to 36s.; good seconds, 35s.; dullish seconds, 34s. to 34s. 6d.; common dull, slightly drossy, 32s. 6d. to 33s.; soft and livery, 30s.; drossy and dirty, 29s., and low dull mixed with dirt, 26s. Six cases Algoa Bay sold on estimated tares at 35s. for good bright hard. Seven cases of good hard hepatic Zanzibar in monkey-skins sold at from 75s. to 77s. 6d. per cwt., and dark at 65s. Good stiff Socotrine in kegs was held at 90s.

**AMBERGRIS.**—A tin of dark and grey mixed lump of weak flavour was held at 50s. per oz.

**ANNATTO-SEED.**—Good bright are offered at 4d. per lb.

**ARECA** was obtainable at 20s., at which small sales have been made privately.

**BALSAM PERU.**—Small sales of genuine, imported direct from Acajutla, were made at 7s. 10d. per lb.

**BALSAM TOLU.**—Large tins slightly soft were limited at 10d., slightly drossy at 9d., and a case of drossy sold at 8½d.

**BENZOIN.**—Very firm for good qualities of Sumatra, but dearer for medium. Thirteen cases of good alomdy Sumatra seconds of storax flavour sold at 8l. 10s. per cwt., twenty cases good fair ditto at 7l. 17s. 6d. to 8l., and for thirteen cases with almonds not quite so bold 7l. 15s. was paid. Five cases middling seconds with false-packed ends sold without reserve at 6l. 10s. to 6l. 15s., being higher, and four cases broken thirds were taken at 87s. 6d.; six cases of common seconds also sold without reserve at 5l. to 5l. 2s. 6d. The "Awa Maru" has brought forty-two cases from Singapore.

**BUCHU.**—Slow. Good green round were obtainable at 8½d., at which small sales have been made privately.

**CAMPHOR, REFINED.**—Five cases of Japanese ¼-oz. tablets sold without reserve at 1s. 9d., which price was also asked for 13 cases of 1-oz. tablets.

**CARDAMOMS.**—The supplies offered were again small, and with an active demand prices appreciated 1d. to 2d. per lb. all round, the following rates being paid: Ceylon-Mysore, extra bold, fine pale, picked, 3s.; good bold pale, 2s.; bold dull, 2s.; bold and medium palish to pale, 1s. 7d. to 1s. 10d.; medium palish to pale, 1s. 4d. to 1s. 6d.; small pale, 1s. 4d. to 1s. 5d., and brown and split 1s. 3d. to 1s. 4d.; seed 1s. 6d. to 1s. 7d. per lb. Indian from Calicut, good bold pale, 2s. 4d. to 2s. 5d.; ditto specky, 2s. 3d. Medium and bold palish to pale, 1s. 9d. to 1s. 11d.; small and medium palish to pale, 1s. 5d. to 1s. 7d.; brown and split, 1s. 3d. to 1s. 5d.; good seed, 1s. 7d.

**CASCARA SAGRADA.**—In auction 195 bags of partly thick and dark, two-year-old bark, were bought in at 40s. per cwt. Privately the market is steady at 35s. spot.

**CASHEW-NUTS.**—Five bags of husky sold without reserve at 24s. per cwt.

**COCA-LEAVES.**—Steady. A case of good green Ceylon-Huanuco sold at 7½d., 17 cases of fair bronzy green realised 6½d., and four cases brown were taken at 4d. per lb.

**DRAGON'S-BLOOD.**—Dearer. A case of fine fiery strained lump sold without reserve at the high figure of 15l. 7s. 6d. per cwt. Ten packages have arrived from Singapore.

**GAMBOGE.**—Two cases of fair Siam pipe, slightly blocky, sold cheaply at 15l. 7s. 6d. per cwt., but other holders were firm at from 16l. to 16l. 10s. per cwt.

**GUAIACUM.**—Two casks of fair glassy lump sold without reserve at from 8½d. to 8½d., and for slightly drossy 8d. was paid, while broken was taken at 6d.

**HONEY.**—The new crop of Jamaica honey has been arriving freely, no fewer than 322 packages being offered to-day, and practically all sold at higher prices, including good to fine pale amber syrup at from 27s. to 30s. 6d.; fair to good amber liquid, 24s. to 26s. 6d.; fair brown liquid and setting (vatted), 22s. to 23s.; and dark brown liquid, 20s. to 22s. per cwt. Good white set sold at 30s. to 32s. 6d., fair pale set 25s. 6d. to 26s. 6d., pale brown set 23s. to 24s. 6d., and ordinary brown set at 21s. 6d. per cwt. Privately old Californian crop is offered at 40s. c.i.f., the spot value being about 45s.

**IPECACUANHA.**—In auction only three bales of Matto Grosso were offered, and sold at from 5s. 6d. to 5s. 7d. per lb. for good, bright natural, being a shade firmer; and for four bales of Minas from 5s. 2d. to 5s. 3d. was paid for slightly mouldy and country damaged. Privately all the East Indian in first hands has now been sold at 5s. 10d. per lb., and at the moment no further consignments are advised. With small stocks holders are firmer in their views. At the close one firm of brokers have advanced the selling price of Matto Grosso to 6s., and another is expected to follow suit to-morrow (Friday).

**KINO.**—A case of good ruby grain was limited at 1s. 5d. per lb.

**OIL, CASSIA.**—Ten cases containing from 75 per cent. to 80 per cent. C.A. were limited at 4s. 6d. per lb.

**OIL, EUCALYPTUS.**—A lot of 12 cases containing 67 per cent. to 68 per cent. of cineol was bought in at 1s. 1d. per lb.; 15 cases had been sold privately.

**OIL, PATCHOULI.**—Six cases "Tiger" brand from Singapore found a buyer at 5½d. per oz.

**ORANGE-PERL.**—Small sales of dull strip were made without reserve at 5d. per lb., and 4 cases of dull Tripoli strip realised 4d. to 4½d. per lb., also without reserve.

**RHUBARB.**—Lower, in view of the new crop offerings. Eleven cases of medium round horny High-dried, with half dull greyish fracture and half dark, sold without reserve at from 6½d. to 6¾d., and three cases small to medium round Canton, with three-quarter fair pinky fracture, found a purchaser at 1s. 5d. Seventeen cases of medium to bold horny High-dried (offered by another broker), with three-quarter good pinky colour, sold at from 7½d. to 7¾d. per lb. without reserve, in order to clear a shipment, and another nine cases of small to bold flat High-dried, with three-quarter good pinky fracture, sold at 1s. 5d. per lb. For new crop good medium orange-coated Shensi, with three-quarter good pinky fracture, 2s. 8d. was refused, the lot being bought in at 3s.

**ROOTS.**—At auction 14 bags of "roots" from Colombo were offered, but no bids were made. We believe this to be the root of *Coscinium fenestratum*, a substitute for calumba, and official in the Indian Addendum of the Pharmacopœia.

**SARSAPARILLA.**—No grey Jamaica or Lima was offered. Fourteen bales of native Jamaica sold readily at an advance of about 1d. per lb. on previous rates; 1s. 3d. was paid for good red and tawny, 1s. 2d. for dull red and grey, 1s. for dull red and grey mixed, and 11d. per lb. for common mixed ditto; three bales of fair red sold at 1s. 1d., without reserve. Privately retail sales of grey Jamaica are reported at 2s. 4d. per lb.

**SCAMMONY-ROOT.**—Two bags of common realised 19s.

**SENNA.**—All the offerings of Tinnevely leaf met with a quick sale, including four bales of fine bold green at 5½d. per lb. Common yellowish to ordinary specky, of which the bulk consisted, sold at from 1¼d. to 1½d., and small greenish at 2d. Pods sold at 2d. to 2½d. as in quality.

**SQUILL.**—Ten bags of fair reddish sold at 1¾d. per lb., and for 27 bags of common brown and partly sea-damaged ½d. was paid.

**TAMARINDS.**—Five casks of fair Calcutta sold without reserve at 11s. 6d. per cwt.

**WAX (BEES').**—In active demand. A parcel of 179 packages of Madagascar readily sold at an advance of 2s. 6d. per cwt., good even brown block selling at from 6l. 17s. 6d. (one lot 7l.), dark and drossy at 6l. 10s. Jamaica was in good demand, 17 packages being offered and sold at an advance of 2s. 6d. to 5s.; fair red to brown mixed selling at 7l. 17s. 6d. to 8l. per cwt. Fifty-three bags of Mozambique realised high prices—viz. 7l. 2s. 6d. for fair brown rolls, and 6l. 15s. for fair, part dark, block. Dull bleached Calcutta is scarce, and held for 7l. 15s. per cwt. Six cases of Australian sold at 7l. 5s. per cwt. for good grey and yellow mixed, and for a bag of sweepings 75s. was paid; a further three bales good pale realised 8l. 10s. A case of East African of uneven colour was held at 6l. 12s. 6d., and a case of good pale to brown Antigua found a buyer at 7l. 7s. 6d. In Liverpool sales of Peruvian have been made at from 7l. 12s. 6d. to 7l. 18s. 9d. per cwt.



**TO CORRESPONDENTS.**—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. Publication of letters does not imply our agreement with the arguments or approval of the statements therein. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects presumably of interest to our readers generally. Letters received after the early posts on Wednesday cannot as a rule be dealt with in the current week's issue.

**BUSINESS INFORMATION.**—We have very full records of the makers or agents for articles and products connected with the chemical and drug trades, and supply information respecting them by post to inquirers. Inquiries regarding any articles which cannot be traced in this manner are inserted under "Information Wanted."

#### Schiff's Reagent for Formaldehyde.

SIR,—In reply to "Formal," who finds that Schiff's reagent is unreliable as a test for formalin in milk, I presume that he distils the milk and tests the distillate, for it has been found that all milks contain a certain amount of non-volatile aldehyde, which would give a pink colour with the reagent—hence the absolute necessity of distilling. Cream seems to contain this non-volatile aldehyde (probably galactose) in larger proportion than does the milk, hence cream *must* be distilled (after adding water); the Schiff's reagent is found to be quite reliable if these conditions are observed. For further information and tests I would refer "Formal" to Blyth's "Foods," p. 162.

Islington.

C. M. W. GRIEB.

SIR,—Had your correspondent "Formal" added a drop or two of dilute hydrochloric acid before applying the test with Schiff's reagent, it is probable the pink colour would not have appeared. There is another possibility—the pink colour may not have been due to the Schiff's reagent at all, but to the presence in the cream of some artificial "annatto" which, when cream or milk becomes sour, reveals its presence by becoming pink. Formalin in minute quantities is not detected so easily as some represent; Heimer's test with sulphuric acid does not always react, and, therefore, must not be relied on to prove absence. To employ more than one test is the wisest plan. Hehner's and Schiff's are both useful, and if a reaction is obtained from each one there will not be much reason to doubt the presence of formalin; if otherwise, one may employ for confirmation the reliable, although more troublesome, test of R. T. Thompson, given in Pearmain and Moor's little handbook on the "Analysis of Food and Drugs." It consists in distilling a portion from 100 c.c. of milk and adding a few drops of ammonia silver nitrate, and setting aside in a stoppered glass tube in the dark, when, if formic aldehyde be present, a strong black colour will be produced.

I am, Sir, your, etc.,

Brighton.

E. F. SALMON.

#### Synthetic Suprarenin.

SIR,—With reference to the report in your valuable journal of April 18, we beg to inform you that the statements of Professor Dixon on synthetic suprarenin have led to further investigations. Dr. J. Biberfeld, of the Pharmacological Institute, Breslau University, has submitted to us an article on the subject, in which he challenges the statement of Professor Dixon, who says that, according to his investigations, synthetic suprarenin is only half as active as that prepared from the organs. In the course of his report Dr. Biberfeld details the experiments which he conducted with the free base of suprarenin synthetically prepared and that obtained from the adrenal glands dissolved in 0.8 per cent. sodium-chloride solution and a sufficiency of hydrochloric acid to neutralise the base. The solutions were eighteen days old when used. Eight intravenous injections were made with the natural and

synthetic preparations alternately at intervals of five minutes, and the rise of blood-pressure was approximately the same with both preparations. The slight differences in individual values were quite within the limits of experimental error from physiological causes, and it is conclusive from these experiments that, as regards rise of blood-pressure, both preparations are identical. The divergent results obtained by Professor Dixon may be due to his having used partially decomposed preparations. The following statement by Dr. F. Stolz and Dr. Flaecher supports this conclusion:

The suggestion that synthetic suprarenin is only half as active as the natural lœvrotatory suprarenin is incorrect, as otherwise, in logical sequence, the dextrorotatory suprarenin would be entirely inactive. We made by synthesis a preparation composed of one half dextrorotatory and the other half racemic suprarenin. The latter, which is optically inactive, consists of equal quantities of the lœvrotatory and dextrorotatory modifications, so that this substance consisted of three-quarters dextrorotatory and one-quarter lœvrotatory suprarenin. If the supposition were correct that dextrorotatory suprarenin is inactive, this mixture could only possess one-fourth the activity of natural suprarenin. Careful experiments on animals with the kymograph demonstrate, however, the complete equivalence of this preparation with the natural substance. It is absolutely necessary in testing the principle to observe the following precautions: (1) The receptacle of dark glass must not liberate any free alkali, and (2) the conditions of storage as regards temperature and exposure to air must be the same. Light has a great influence on suprarenin solutions, and experiments have shown that even Röntgen rays are capable of decomposing the preparations in their original packages.

Besides the foregoing, we may state that comparative trials with the synthetic preparation and that obtained from the adrenal glands made by Privy Councillor Professor Dr. Hans Meyer in the Pharmacological Institute, Vienna, showed both substances to be unquestionably identical in respect to their influence on blood-pressure and vascular contraction and in anæmic and mydriatic actions, as well as on the diuresis and glycosuria. Corroborative pharmacological results have been obtained by Dr. Bachem, of Bonn University; Dr. Hans Hoffman ("Münchener medicinische Wochenschrift," 1907, No. 40); Professor Braun, of Zwickau; Dr. Bratt, of Stockholm; Dr. Fritzsche, of Leipzig; and many others.

Yours truly,

Pro Meister, Lucius & Brüning, Ltd.,  
51 St. Mary Axe, E.C. J. KÖHLER.

#### Sale of Medicated Wines.

SIR,—A recent case in the Bradford Police Court has raised the question as to whether Coleman's Wincarnis with quinine can legally be sold by chemists without a wine-licence. Messrs. Neve, Beck & Kirby, solicitors to the C.D.A., have recently been in communication with the Board of Inland Revenue on this subject, and they have received from the Assistant Secretary of the Board a letter in which it is stated that, provided the article contains when sold quinine equivalent to not less than 1 grain per fluid ounce of quinine hydrochloride, and provided it is labelled so as to show from the dose that it is intended to be used as a medicine and not as a beverage, no objection would be raised to its sale without a wine-licence by any registered chemist or druggist.

Yours faithfully,

W. JOHNSTON.  
184 and 185 Temple Chambers, E.C., May 15.

#### Insurance 2d.

SIR,—In charging for the conveyance of goods per — the way-bill frequently includes 2d. extra for insurance. It so happened that an invoice for the goods, received in advance, had on it "Insurance not charged." The carman, on being asked who insured the goods, said, "Don't know," and on our demurring to pay, replied, "You needn't pay if you don't want to." Who wants to pay after goods have been safely delivered and when there has been no agreement about insurance? I should be glad to know what it all means. Who insures? And if a barge sinks or



burns or goods are lost, can I not recover? Railway companies do not charge for insurance, but they try to charge for delivery, and if we order "to destination," the sender pays the same, and we pay nothing. Are these extra ways and means of extracting payment from the unwary? I shall be glad to know.

Yours truly,

May 12.

KENT. (196/24.)

[Some other experiences in this and allied matters would be useful. These 2d. charges run away with some profit in the course of a year.—EDITOR.]

#### "One of the Great Unqualified" by Examination.

SIR,—Numbers of men employed by chemists and stores at the present day have come into the trade by the back door, and the sooner steps are taken to eliminate these men the better will it be for the future of the drug-trade. If the *bona-fide* assistant (that is, the man who has passed the Preliminary examination and served a proper apprenticeship) is not recognised and given some sort of legal status, things will go from bad to worse. If you are going to allow men and women who have never been behind a chemist's counter or served any apprenticeship to sit for the Minor examination and be given the diploma allowing them to keep open shop for the sale of poisons, I say again it is about time the men with ten, fifteen, and twenty years' experience and a proper apprenticeship should be recognised, and not looked upon as something short of criminals for selling a pennyworth of laudanum. I would suggest a register being kept of every assistant who had served a proper apprenticeship with a chemist and druggist, and an annual subscription to be paid by each assistant on that register, and every member of the trade furnished with a copy annually; also that every employer should refuse to engage any man whose name is not on that register. Of course, assistants who had been found guilty of certain offences would have their names erased from the register, thereby protecting employers against the black sheep of the trade.

Yours faithfully,

FIFTEEN YEARS IN THE TRADE. (197/52.)

[Our correspondent is apparently unaware of the fact that the Pharmacy Act, 1868, gives no power to require candidates for the Minor examination to serve an apprenticeship to a registered chemist or anybody else. If it did the Pharmaceutical Society would have required this condition long ago, and would not be seeking the clauses as to training and a curriculum now embodied in both Bills before Parliament. It was not the intention that the class required for 1868 Act purposes should be so highly trained, as the 1852 Act provided for properly qualified pharmacists. It has frequently been pointed out in these columns that the qualifications of registered chemists have gone ahead of the statutory requirements and public demands, but in the hope that there would be more general recognition of the advantages to the public of a thoroughly trustworthy body of men. We cannot by Act of Parliament compel people to see this, and that is more wanted than any Act to raise the qualifications of chemists or to bring the unqualified within the fold.—EDITOR.]

#### Dispensing Notes.

##### Carbolic Skin-cream.

SIR,—I have had trouble with the following prescription. The glyc. acid. carbolic. separates. I have tried various methods of combination, but without alteration of the ingredients have met with no success:

Glyc. acid. carbol. ...	...	...	3j.
Amyli ...	...	...	3j.
Zinc. oxidi ...	...	...	3i.
Ol. olivæ ...	...	...	3j.
Lanolini ...	...	...	3j.

The cream for the skin.

Yours truly,

S. L. (191/29.)

[Mix the starch with 48 minims of glycerin and 20 minims of water, heat, as in making glycerin of starch, till the mixture becomes thick, by which time the water will be driven off. Rub this starch-paste with the lanoline, olive oil, and zinc oxide to a smooth cream in a warm mortar, and lastly add 12 grains of phenol.]

#### Boric Acid and Potassium Chlorate.

SIR,—Referring to my query concerning the supposed reaction between boric acid and potassium chlorate mixed together in the dry state (*C. & D.*, May 2, p. 692), I have come to the conclusion that no reaction occurs if both are pure; and I can only suppose that so definite an evolution of chlorine as I detected was caused by an impurity (trace of mineral acid or acid sulphate maybe) in one or both of the substances. The particular samples of boric acid and potassium chlorate are, unfortunately, not available now.

Cheltenham.

Yours truly,

S. J. ROBINSON.

#### Legal Queries.

For concise statements respecting various Acts which affect directly or indirectly the Chemical and Drug Trades, see the "*C. & D. Diary*," 1908, p. 456; Stamped Medicine Law p. 435; Pharmacy and Poisons Law, p. 448; and Patents Law, p. 442.

*Vet.* (195/66).—Medical prescriptions, under Section 16 of the Pharmacy Act (Ireland), 1875, includes veterinary prescriptions, otherwise there would be no necessity for the provision under Section 31 exempting members of the Royal College of Veterinary Surgeons and persons holding certificates in veterinary surgery from the Highland and Agricultural Society of Scotland for dispensing medicines for animals under their care.

*Antimony* (198/51).—If your tenant's fittings are not fixed to the walls in such a manner as to make them "fixtures" legally, he may remove them, but if in so doing he damages the plaster or any other part of the walls he is bound to make the damage good.

*N. R.* (198/74).—An indenture is not requisite for apprenticeship, but is desirable when a premium is paid. In either case the stamp-duty on the indenture is 2s. 6d. See *C. & D. Diary*, p. 458. If an agreement for employment is reduced to writing, the stamp-duty on the document is 6d.

*Argon* (201/21) gave a traveller a verbal order for goods which were to be delivered carriage-paid. They arrived in a damaged condition with carriage to pay, and the makers now sue "Argon" for the value of the goods. What should he do? [He should defend the case, bringing evidence in support of his statement about the verbal order, and submit to the Court copies of his letter to the makers in which he informed them of the manner in which the goods were ordered to "Argon." It has to be remembered that in England delivery of goods by the seller to the carrier is regarded as delivery to the buyer—in other words, that the carrier is the buyer's agent—unless where special terms are agreed to. Thus "carriage paid" is equivalent to delivery at the premises of the buyer; hence "Argon" must satisfy the Judge as to terms of his order.]

*Vin. Ipecac.* (202/43).—If there had been a little less humour and more point in your letter it would have been suitable for publication.

*Foreigner* (202/70).—An apprenticeship entered upon without written agreement is an ordinary engagement of an employé, and may be determined by either party giving the notice customary in the district. In Scotland a week's notice in the retail drug-trade is not unusual. From the facts which you state we do not consider that the apprentice has not acted within his rights.

*E. V. Z.* (202/30).—We do not undertake searches in regard to trade-marks, and your questions come partly within that category, but as far as we know none of the words is a registered trade-mark. You must, however, satisfy yourself as to the common law rights of the users of the words, and upon that we cannot advise, as we do not undertake work of that nature.

*Pharmacist* (203/36).—(1) The Major certificate of the Pharmaceutical Society of Great Britain is not valid in Ireland. (2) We are under the impression that the custom in regard to Congreve's elixir has prevailed for more than a quarter of a century, but we will inquire.

#### Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months. A preliminary condition for reporting on samples submitted is that all particulars as to source and uses are given to us.

*L. & L.* (156/29).—FLY-ATTRACTING POWDER.—A little meat-extract rubbed down with milk-sugar is a great attraction to flies, and would entice them into the traps.



*Nemo* (East London) (162/26).—**SYRUP-LIQUORS.**—The process for liquor pro syr. rhei consists in making a 1-in-2 w/v liquid extract of rhubarb and coriander. For every pound of rhubarb add  $\frac{1}{2}$  lb. of coriander in coarse powder and percolate with 20-per-cent. alcohol containing 5 per cent. of glycerin. To each fluid oz. of the finished liquor add half a minim of oil of coriander to bring up the flavour. One part of the liquor diluted with 7 parts of syrup produces a full flavoured syrup of rhubarb. A similar method is adopted in the case of liquor for syrup of senna, the quantity of oil of coriander indicated in the Pharmacopœia being added to the fluid extract of senna at the finish.

*S. R. C.* (163/35).—**FIRE-EXTINGUISHING PROCESS.**—The method to which you refer depends on the use of carbonic acid gas for providing an atmosphere which does not support combustion. Syphons of aerated water with a sprinkler nozzle are employed, or the special form of aerator in which liquid carbonic acid is used for charging the water. The red-painted metal vessels which one sees in the carriages of electric railways are charged with a solution of an alkaline carbonate, and when required as a fire-extinguisher a smaller vessel of either hydrochloric or sulphuric acid is broken, so that the acid comes in contact with the carbonate and at once generates a large volume of gas. The liquid is made by dissolving—

Ammonium sesquicarbonate	...	4 $\frac{1}{2}$ lb.
Sodium bicarbonate	...	4 $\frac{1}{2}$ lb.
Borax	...	1 lb.
Water	...	10 gals.

Each gallon of this solution is provided with a separate thin-glass vessel of acid—2 to 3 oz. of hydrochloric acid. There are various mechanical arrangements for breaking the acid vessel inside the carbonate solution.

*F. & Co.* (11/18).—**YEAST-EXTRACT.**—We gave details of the process of manufacturing yeast-extract in the *C. & D.*, March 23, 1907, p. 467, to which please refer.

*Booco* (161/69).—**FLOOR-POLISH.**—Where this is required in large quantities a paste such as the following is employed:

Paraffin wax	...	1 $\frac{1}{2}$ lb.
Resin	...	1 $\frac{1}{2}$ lb.
Mineral oil	...	2 pints
Turpentine	...	1 pint
Kerosene	...	1 pint
Naphthalene	...	2 oz.

Dissolve the naphthalene in the turpentine, melt the resin and wax, remove from the fire, and stir in the other ingredients.

*Ramensis* (Tanta) (168/31).—(1) The metal percolators used for tincture-making on a large scale are of block-tin or tinned copper. For quantities up to 2 gals. heavy glass percolators may be employed. (2) Infusions and decoctions made from concentrated preparations are inferior to the freshly made galenical. Of late years, however, there has been a considerable improvement in the methods of making the concentrated solutions, so that the diluted preparations more nearly resemble those made by the official methods. (3) The sediment thrown down from some tinctures on standing does not as a rule represent loss of activity. It consists of indefinite vegetable matter classed as extractive. (4) **HAIR-TONICS** often contain quinine, and it is preferable to use a soluble salt such as quinine bihydrochloride. Quinine acts in hair-washes as a bactericide, and it could not generally be replaced by the oleate owing to the insolubility of the latter in water. (5) The quick method of mellowing eau de Cologne which is figured in "Pharmaceutical Formulas" is the one we favour. In this process air and sunlight are the factors which combined improve the odour of the perfume.

*J. H.* (Little Falls, N.Y.) (134/3).—**SEPARATING SILK FROM WOOL.**—There is a patented process for destroying cotton or silk in woollen rags (Roberts and Crossley, 24,641, 1903) which consists in impregnating the material with hydrochloric acid, squeezing out the surplus liquid, and drying in a stove at a high temperature. This carbonates cotton, silk, or vegetable fibres, but does not affect the wool. There is no book published on the subject as far as we are aware.

*Cera* (177/15).—**CARNAUBA WAX.**—We do not know of any method of improving the odour of carnauba wax which is not at the same time a bleaching-process. Filtration through animal charcoal bleaches the wax, but the best agent to use is hydrogen peroxide. If the loss of colour does not matter in the preparation for which you are using the wax you should try the following: Granulate the wax and immerse in hydrogen peroxide (5 to 10 vols.) saturated with ammonia or sodium carbonate and kept at 50° C. The addition of  $\frac{1}{2}$  per cent. of borax aids the process. When the bleaching is complete the wax is separated, washed with water, melted, and poured into moulds.

*F. H. R.* (14/23).—Instructions as to obtaining patents for inventions are given in the *C. & D. Diary*, p. 464.

*S. K.* (Tanta) (158/20).—**MANUFACTURE OF OLIVE OIL.**—The olives are first ground in large stone crushers, with bevelled-edge millstones to fit the concave bottom of the containers. The millstones are attached to a horizontal bar in the centre of the bowl, and it is by means of this bar that the stones are revolved. Some mills are operated by steam-power, but many consider that animal power is preferable, as olives require slow and careful handling. The millstones are regulated so as to reduce the fruit to a paste without crushing the stones. The paste is put into woven bags, and these are transferred to presses when the oil is forced out. Warm water is sometimes poured through the presses so as to assist the flow of the oil, the latter being skimmed off the surface of the water. The oil is allowed to settle and is decanted from the lees. From the residue inferior oils are prepared.

*Amateur Gardener* (132/17).—We cannot trace the name you give in any of the usual botanical reference works.

*Pernambuco* (143/65).—**MANUFACTURE OF MANURES.**—A list of books dealing with the uses of manures was given in the *C. & D. Diary*, 1906, p. 508. In regard to the manufacture of manures a useful book is *F. W. Semper's* "Manures, how to Make and how to Use them" (Burpee, Philadelphia, 1894). This work contains recipes for the various fertilisers used for different crops. The latter part of your letter refers to the manufacture of manures from sewage, for which you would have to consult books dealing with sewage disposal. The simplest method of preparing sewage sludge for use as manure is to pump the sludge on to a rectangular plot of land which has been banked up at the edges. The liquid constituents are filtered off into the earth, and when the solid residue becomes sufficiently dry it is dug out and sold to farmers. Many experts are doubtful as to the value of sewage sludge for manurial purposes, and the practice in London is to take the sludge out to sea. We do not think this system would be adopted if there was any commercial use for the sludge as manure.

*W. M. H.* (167/18).—**LIMING NUTMEGS.**—Unlimed nutmegs which are imported to this country are frequently limed in London, owing to the preference of buyers for that variety. The process of liming consists of shaking the nutmegs in a cask with a handful of recently prepared well-dried lime. A wet process is in vogue in the Moluccas, in which a mixture of salt water and lime is employed, but it has been proved that the dry method possesses several advantages.

*H. W.* (164/18).—**THE MANUFACTURE OF NOUGAT.**—It is albumen either dry or as white of egg that is used to make nougat bulky. The following is a manufacturing recipe for French nougat:

White sugar	...	10 lb.
Water	...	2 pints
Glucose	...	5 lb.
Clear honey	...	5 lb.
White of forty-eight eggs,		
Vanillin	...	$\frac{1}{2}$ dr.
Dry blanched almonds	...	4 lb.
Pistachio-nuts	...	1 lb.

Beat up the whites of the eggs until quite stiff, adding a pinch of salt. Put the sugar into the copper pan, add the glucose and honey, and cook to a "hard boil." Pour about 2 lb. of the batch into the eggs, whipping the whole till well mixed. Cook the remainder of the sugar batch to a "crack," and pour it into the egg-mixture, and beat till well mixed. The pan containing the mixture is then put on a steam-bath and cooked to "snap," when the vanillin, almonds, and pistachios are added, the batch being finally poured out on to a tray lined with wafers. When cool the nougat is cut up and wrapped in waxed paper.

*J. D. S.* (U.S.A.) writes in regard to the medical or surgical treatment of a person who has been bitten by a rabid dog—the Pasteur Institute being out of the question owing to distance. The best treatment is, in the case of the limbs, immediately to stop the circulation of the blood to the part by means of a compress above the wound. The bite should then be thoroughly washed by directing on to it a stream of water under pressure. Other means of cleaning the wound are by sucking or cupping. The wound having been cleaned, it is customary to apply freely a caustery, either potential or actual. It is most important to act quickly to prevent the absorption of the poison by making the wound bleed freely, and, as in snake-bites, the other object of treatment is to render harmless the poison that has been taken into the tissues surrounding the wound. Potassium permanganate has been found to be of great service; the crystals or powdered salt are freely rubbed on to the wound, bleeding being promoted by scraping with a lancet.



# THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, MAY 23, 1908.

## PUBLISHER'S NOTICE TO ADVERTISERS.

Advertisers are desired to take note that the advertisements of Businesses for Disposal and Wanted, Situations Open and Required, Exchange Column, &c., belong to the **PREPAID CLASSES**, and to ensure the due insertion of the announcements the remittances must accompany the instructions. A great amount of unnecessary correspondence is occasioned by the non-observance of this regulation, and the Publisher hopes that the advertisers will assist in the quick preparation and despatch of the Supplement by strictly observing this rule.

A Copy of this Supplement is inserted in every Number issued of "The Chemist and Druggist."

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MIDDLESEX.—Nice Dispensing, Prescribing, and Light Retail, Photographic and good Specialities; returns £600 and very profitable; price only £300; a bargain.

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3.—HOME COUNTY (Market Town).—Light Family Retail, Prescribing, and Dispensing Business; returns over £1,000; good profits; very best position; large house and garden; price £800; personally inspected.

4.—YORKSHIRE.—Old-established Light Family Retail Business, with valuable Veterinary Specialities; returns average £800; splendid position; good house and premises; low rent; price £450; stock and fixtures worth price asked.

5.—EASTERN COUNTY.—Light Family Retail and Dispensing Business, in good position of important town; returns over £700; net profit £200; well-fitted Pharmacy and well stocked; price £550.

6.—HAMPSHIRE.—Good-class Retail and Dispensing Business, in high-class residential district; no opposition; returns £400; net profit £170; well-fitted Pharmacy; good stock; price £325, or offer.

7.—KENT (Fashionable Seaside Resort).—Good-class Retail, Dispensing and Prescribing Business; returns £750; very good position; handsome Pharmacy, well fitted and stocked; good house; price £450; worth special attention.

8.—VICTORIA STATION (Near).—First-class Retail and Dispensing Business; in same hands many years; returns over £1,250; net profit £430 clear; splendid position; scope for increase; price £1,050; personally inspected.

9.—LONDON, N. (main road).—Light Cash Retail, Dispensing, and Prescribing Business; returns £1,400, increasing; very handsome Pharmacy, in excellent position, and well fitted and stocked; price £800.

10.—MIDDLESEX (Few Miles out).—Good-class Retail and Dispensing Business, in first-rate position of fast-growing suburb; returns about £1,300; modern Pharmacy, well fitted and stocked; price £700, or £100 valuation.

11.—SOUTH COAST.—Good-class Retail, Dispensing, and Prescribing Business; returns about £750; very good profits; splendid position; opposition weak; modern Pharmacy, well fitted and stocked; price £500.

12.—BANKS OF UPPER THAMES.—Good-class Retail and Dispensing Business, in best position of good residential town; returns £1,000; net profit £300; attractive pharmacy; exceptionally well fitted and stocked; price £750.

13.—LOWESTOFT.—Good-class Retail and Dispensing, with Photographic trade; returns nearly £1,000; very fine position; handsome shop; price simply valuation, about £450.

14.—MANCHESTER (Near).—Light Cash Retail, Prescribing, and Dispensing Business, in small town; returns £630; net profit about £180; convenient house and shop; low rent; price £365; simply valuation.

15.—CAMBRIDGESHIRE.—Old-established Mixed Country Retail Business, in small market town; returns £473; plenty of scope; low rent; good house and garden; price £275, or valuation.

16.—WILT'S (Small Town).—Good-class Family Retail; easily worked; returns over £500; no cutting; net profit nearly £200; good house and splendid garden; price £450, little more than valuation.

17.—LONDON, N.W.—Light Retail, Prescribing, and Dispensing Business; returns £1,250; net profit £391; low rent, on lease; well-fitted shop, fully stocked; good reasons for selling; price £1,000 or offer.

18.—LONDON, W. (Few Miles out).—Cash Retail, Prescribing, and Dispensing with own specialities; returns £625; good profits; low rent; convenient house; price £400, about valuation; part can remain; personally inspected.

## BUSINESSES WANTED.

MESSRS. BERDOE & FISH having recently disposed of a large number of businesses, are in immediate want of sound concerns, returning from £750 to £3,000 for cash purchasers still unsuited; also a first-class business in London or Provinces showing net profit of £500 to £800 per annum. Correspondence invited, terms sent on application.

G. BERDOE established the firm in 1870, and W. S. FISH was apprenticed to him in 1877.



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## TO SUBSCRIBERS ABROAD.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents, or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

# BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

## COLONIAL BUSINESSES.

We call the special attention of our Colonial subscribers to the opportunity this Supplement affords when they wish to dispose of their Businesses, of getting into touch with likely buyers either at home or in the Colonies.

**COUNTY DURHAM.**—Small, old-established Business for immediate Sale; has only changed hands twice during last 70 years; very profitable; will accept first reasonable offer; perfectly satisfactory reasons for sale. Apply, 26/4, Office of this Paper.

**DEVON (in a Large Town).**—Good-class Retail and Dispensing Business, returning over £800, with scope for doing much more, being in one of the best positions, and a most elegantly fitted shop; price £200, and valuation of stock and fixtures; an energetic man would find plenty of scope here; ill-health cause of sale. 28/50, Office of this Paper.

**HERTFORDSHIRE.**—First-class Cash Retail and Dispensing Business; returns over £2,200, with a net annual profit of £500 after paying all expenses; handsome modern shop, good fittings and evenly stocked; price £1,500, or small goodwill and valuation of stock and fixtures; cash purchasers only entertained. Apply, "Herts" (28/005), Office of this Paper.

**KENT.**—For immediate Disposal, a genuine medium-class Business in market thoroughfare of good seaside town; well fitted and stocked; good dwelling-house; price £500, or near offer. Apply, 04/52, Office of this Paper.

**KENT COAST.**—Genuine old-established Dispensing and Prescribing Business for Sale, with scope for increase in Photographics; well-stocked and nicely fitted shop, on sea-front; commodious house; excellent store and cellarage, also greenhouse; rent £65; returns about £700, at good profits; good postal connection for several own Specialities. 25/21, Office of this Paper.

**ONDON (West-end).**—Genuine high-class Dispensing and Retail Business for Disposal, in busy thoroughfare; large number of proprietary articles sold, yielding substantial profit; well fitted and stocked; lock-up Pharmacy; returns nearly £1,300 per annum; no agents need apply. 22/39, Office of this Paper.

**ONDON, S.E.**—Double-fronted, well-fitted shop; Retail and Prescribing; good opening for Dentistry and Photography; returns £400, gradually increasing; nice convenient house; will take valuation; health reason for selling. "Manor" (23/35), Office of this Paper.

**ONDON, E. (main thoroughfare).**—One of the healthiest and genuine Businesses going; well-fitted, modern shop; returns average £40 weekly; excellent profits; profitable Specialities; good lease; convenient house, with side entrance; rent £55; every investigation allowed; genuine reasons for disposal: to effect a speedy sale low cash offer will be accepted. Address, "H.L." 351 Brockley Road, Roffton Park, London, S.E.

**ONDON, N.**—Light Retail and Dispensing for immediate Sale; returns £430; rent £50; well fitted and stocked; convenient use and garden. Apply, 28/21, Office of this Paper.

**MANCHESTER.**—Corner shop, handsomely fitted; electric light; splendid living accommodation (at present let off); good family trade with own Specialities; satisfactory reasons for disposal; particulars on application; price required £500. 22/25, Office of this Paper.

**MANCHESTER.**—An exceptionally well-fitted Pharmacy (Branch), well stocked, with excellent living accommodation; wants personal attention; growing district; about £400 required, or best offer. 24/12, Office of this Paper.

**MIDLANDS.**—Genuine old-established (1857) Business, doing £1,600; Light Retail, Optical Prescription, and Surgical Appliances; modern double-windowed shop, in centre of busy town, with imposing frontage to main thoroughfare; large house (part let off); long lease; Wine Licence; inquiries from purchasers and investigation invited. 22/32, Office of this Paper.

**MIDLANDS (in Manufacturing Town).**—Small Retail and Prescribing for Disposal; doing £7 weekly, at excellent profits; house and small garden; low price for quick disposal; ill-health cause of sale. 28/4, Office of this Paper.

**NEWCASTLE (near).**—Old-established Drug Business; Post Office attached; owner must sell on account of ill-health; price for prompt purchaser £150, including stock, fixtures, and goodwill. Apply, in first instance, "F. C. S.," c/o John Ismay & Sons, Newcastle-on-Tyne.

**NORWOOD, S.E.**—Old-established Chemist Shop, which at one time did large trade, but which, through neglect, etc., has been re-entered by landlord, who is open to let shop on lease as going concern; only closed last week; stock, fixtures, etc., at sacrifice. Apply, 141 Silvermere Road, Catford, S.E.

**NOTTINGHAM (Suburb).**—For immediate Disposal, a genuine Light Retail and Dispensing Business; returns £600 under manager; plenty of scope for increase by energetic personal attention; old-established; modern fittings; well stocked; imposing front; main thoroughfare; thickly populated neighbourhood; price £160. Apply, Cook, Chemist, Nottingham.

**NOTTINGHAM.**—Excellent fitted Retail; splendid position; double fronted; large surrounding neighbourhood; low rent; price about £260, or best offer accepted; must be sold; proprietor declining Retail and leaving town. Apply, 28/22, Office of this Paper.

**SCOTLAND.**—Branch Business in good-class Northern town for Sale; Retail, Dispensing, and Photographics; suit young man with small capital; light stock and easy entry. Particulars from W. Paterson & Sons, Wholesale Chemists, Aberdeen.

**SEASIDE TOWN (near Liverpool).**—A good Dispensing and Photo. Business for Sale; price, valuation (about £700); good stock; splendid fittings. Particulars, "A. L.," Evans Sons Lescher & Webb, Liverpool.

**SOUTH COAST.**—Old-established Business for Disposal; Light Retail, Dispensing, and Prescribing, in fashionable seaside town; returns under management £550; nicely fitted, well stocked; good opening for Photography; no reasonable offer refused to effect an immediate sale. Part purchase can remain. Apply, "Sulphonal" (28/8), Office of this Paper.

**SOUTH YORKSHIRE TOWN.**—Light middle-class Retail Business for Disposal; present returns average £420; has been under management for several years; a profitable trade in a Brewing Speciality also attached; owner entered Medical profession. Further particulars to bona fide applicants, "Jacobus" (24/17), Office of this Paper.

**SUFFOLK (Suburb of Large Town).**—Cash Retail and Prescribing Business; modern double-fronted shop, well fitted and stocked; main road; returns £558, under manager; proprietor would easily do £800; rent £28; lease granted; price £300, or near offer; a real bargain; only wants looking at. "Branch" (28/05), Office of this Paper.



# BUSINESSES FOR DISPOSAL (continued).

**WEST OF ENGLAND (Coast).**—A good-class Family Retail and Dispensing Business; best position in the town; good house; same hands 14 years; returns between £1,700 and £1,800, at excellent prices; over 8,000 prescriptions dispensed yearly; stock and fixtures worth £1,200; price £1,500; valuation terms arranged if desired; further particulars to *bona fide* cash buyers. Address, "S. W. R." (28/5), Office of this Paper.

**WORCESTERSHIRE (Manufacturing Town, 26,000 Inhabitants).**—Small Business for Sale; immediate possession. "C. M., c/o Mr. J. S. Palmer, Chemist, Thornbury, Gloucester.

**YORKS (Manufacturing Town West Riding).**—Genuine Business; price, valuation of stock and fixtures, about £350; owner bought another business; established 13 years; in same hands all the time; chance of a lifetime; Wine License; good Photo trade; Tooth Extraction; good Specialities. Apply, "M. M." (204/30), Office of this Paper.

**YORKSHIRE (Manufacturing Town).**—Nice General Retail Business; returns last year £14 weekly; modern double-fronted shop; good storage accommodation; excellent house; private entrance; reasonable rent; good position in principal street; every information given to genuine applications; price, valuation only. 26/6, Office of this Paper.

**YORKSHIRE (North-East, near Coast).**—Middle-class suburb; good house; double-fronted shop; rent £35; returns £840; net profit £200; established 5 years; price, valuation, about £400. F. W. Smith, 3 Belgrave Terrace, Leeds.

**A REAL** good opening is offered for quick Sale, in large Yorkshire town; only open 12 months, and done over £680; rent low; house; good position in healthy and quickly increasing suburb; will sell at low figure; vendor can give satisfactory reasons for disposal; every investigation. "Teuax" (26/8), Office of this Paper.

**A N** exceptional opportunity arises for acquiring a Wholesale and Retail Business, comprising the Druggist Sundries portion, with a good connection throughout the kingdom; splendid mail-order Retail connection; proprietorship of a well-known publication, copyrights and trade-marks, together with the Retail, Prescribing (counter and mail), Optical, Stationery, and Post-office; P.O. covers rent; ill-health sole cause of disposal; principals only. "W. R. B." (24/27), Office of this Paper.

**EXCELLENT** Opportunity.—Pressing family reasons, sacrifice for quick sale; cash price £260; over £14 cash weekly under manager; proprietor increases at once; very profitable indeed; unequalled position, busy Central London; magnificent window; electric light; private entrance; long lease; Consulting, Prescribing, Rubber goods; every business convenience; newly redecorated. Genuine buyers apply, 27/25, Office of this Paper.

**FIRST-CLASS**, long-established Country and Dispensing Business for immediate Disposal: Eastern Counties; death vacancy; value about £2,500. Apply, by letter only, to Barron, Harveys & Co., 6 Giltspur Street, London, E.C.

**FOR** Sale.—Small neglected Business, London, S.E.; plenty of scope for increase; suitable for beginner; neatly fitted and good stock; rent £32, with house, at present nearly all let off; price £50 or offer. Apply, "C." (27/36), Office of this Paper.

**FOR** Sale.—Good-class Business in country town in Midlands; no opposition for a radius of 8 miles; returns £2,000 to £2,500, with fair profits; energetic, capable young man with capital would do remarkably well; no agents. Apply, "Cinchona" (203/63), Office of this Paper.

**GENUINE** good-class Dispensing and Retail Business in fashionable inland town (South); large shop, well fitted and stocked; good house, in thorough repair; increasing returns; good profits; owner retiring; price £500 for quick sale. "Pharmacien," c/o Heaton, Squire & Francis, Southwark Street, London.

**LOCK-UP** Cash Drug-stores in country town for immediate Disposal; receipts £5, at good profits; low rent; plenty of room for increase; well stocked and fitted; price £120, or near offer; part could remain if desired; investigation courted. 28/2, Office of this Paper.

**ROBERTSON & SON**, Chemists, Barrow-in-Furness, have for Disposal their Branch Establishment at Vickerstown, Walney Island; shop, a double-fronted one, is very handsomely fitted by Curtis & Son, Leeds; excellent house; estimated population of Walney, 5,000; no opposition. Particulars on application.

**THAT** very old-established Business, until recently carried on by Thomas Riley for a period extending over 50 years, is now for Disposal owing to Mr. Riley's death; valuation nominal to an immediate purchaser, all at about £100; thickly populated working-class neighbourhood. Full particulars, apply, Mrs. Riley, 43 Barker Gate, Nottingham.

**TO CHEMISTS.**—For immediate Sale, a Family Drug-Business in a North-West Lancashire village; takings about £500 per annum, steadily improving; rent £24; good house connected with business premises; price required £225. Apply "Quinine," c/o Evans Sons Lescher & Webb, Ltd., Liverpool.

**£25** for stock and fixtures; quick sale; Drug-stores, in main thoroughfare; part could be let off; separate entrance; low rent, inclusive. 28/13, Office of this Paper.

**£30** Cash.—London.—A gentleman going abroad wishes to Sell small ready-cash Business with good connection in United Kingdom; small stock; light work; net profits 25 per cent. to 33 per cent., representing not less than £50 per annum; scope for increase; would suit traveller or private agent. Henri, 34 Oakfield Road, London, N.

**£150** cash for a very compact and profitable Branch in busy main thoroughfare in South Yorkshire, doing £7 weekly, and has done £10; an energetic man could double turnover; rent moderate and good house; now under management; fullest investigation given. Apply, 26/26, Office of this Paper.

**£160** net cash.—An old-established Pharmacy (Liverpool); central position, good main thoroughfare; rent £40 and taxes; shop and house; returns over £450 per annum under management; modern fittings and cases; well stocked; not changed hands for the last 15 years. "G., c/o H. Jackson & Sons, 29 School Lane, Liverpool.

**£210.**—Newcastle-on-Tyne.—Good-class Family and Dispensing Business for Disposal, in good residential suburb; returns last year £550; good house; moderate rent; good reason for disposal. 21/12, Office of this Paper.

**£400.**—West Suburban first-class Family Business, well stocked; returns £750; profitable; stable, 10 rooms, bath; 15½ years' lease; very low rent (£48). Also £500.—S.W. Suburb.—Good General Profitable Business; returns £67 10s., increasing monthly; profits £315 per annum; well fitted and stocked; lease 19 years; rent £50; convenient house; full inquiries invited, *bona fide* applicants. 28/19, Office of this Paper.

## BUSINESSES WANTED.

**WANTED**, a genuine Business for cash (£300); good-class Dispensing, Prescribing, and Photographic, in healthy town; must have plenty of scope for improvement, convenient accommodation for living, and bear the strictest investigation. Apply, with full particulars (in strictest confidence), to "Pronto" (22/24), Office of this Paper.

**WANTED**, in South Wales, Family Retail Business, showing net profit of £300 to £400; Agricultural market town, where Welsh language is not essential, preferred. Full particulars to "Phenol" (20/15), Office of this Paper.

**WANTED**, a small, genuine Business, immediately; must bear strict investigation; W. or S.W.; or one on easy terms. Full particulars, price, etc., to "A. B." (23/29), Office of this Paper.

**WANTED**, a good-class Business; London suburb or South Coast. Apply, with full particulars, to "N. S." (25/39), Office of this Paper.

**WANTED**, a sound Business, with plenty of scope for increase, returning £800 to £1,000, in good market town preferred, but not essential; managership or partnership in larger concern would be entertained. "Efficient" (24/29), Office of this Paper.

**WANTED**, a sound Business for cash in North Somerset, North Devon, or Cornwall, or a neglected one, but capable of improvement, would be entertained; a coast town preferred. All replies should be sent early (in strict confidence) to "Devon" (24/39), Office of this Paper.

**WANTED**, small genuine Business in London; neglected one not objected to; lock-up shop and room in City or West preferred; open to purchase immediately, cash down. Lowest price and full particulars as to lease, rent, and takings, also if assistant kept, to "P. H." (27/28), Office of this Paper.

**LONDON.**—Wanted, by well-connected Medical man, use of a little Room at a Chemist's, couple of hours a day, for consultation, between Leicester Square and Soho preferred; terms must be moderate, or special arrangement. Particulars to "Veronal" (20/38), Office of this Paper.

## TO LET.

**EXCELLENT** Shop, market position, Croydon parish; splendid opening for Chemist; rent £60 per annum, on lease. Bates, 2 Imperial Buildings, East Croydon.

**TO CHEMISTS.**—Excellent premises, main road, Peckham; fitted for this business; old-established trade has been carried on for many years, but sacrificed through misfortune; excellent opportunity to acquire goodwill for price of fixtures only; low rent. For particulars apply C. Rawley Cross & Co., Ilchester House, Uxbridge Road Station, W.



## TENDERS.

Re A. LOWE, LTD., Chemists (in liquidation), 1 Pier Terrace, LOWESTOFT.

**TENDERS** are invited for purchase of Stock, Utensils, and Tenant's Fixtures.  
Tenders to be sent in by 12 noon on Wednesday, June 3, to Fred. S. Culley, Chartered Accountant, Queen Street, Norwich.

Re F. E. WOODS, A BANKRUPT.  
(Manchester 27 of 1908.)

**TENDERS** are hereby invited for the Goodwill, Stock-in-Trade, and Fixtures of and in relation to the business of a Chemist and Druggist carried on by the above-named bankrupt at 230 Cheetham Hill Road, Manchester. The premises are well adapted for the business, and are situate on one of the main roads leading out of Manchester.

Orders to inspect the stock may be obtained from the Official Receiver in Bankruptcy, Byrom Street, Manchester.

Tenders, endorsed "Re Woods," must be addressed to the Official Receiver in Bankruptcy, Byrom Street, Manchester, and delivered on or before the 29th day of May, 1908, at 4 o'clock in the afternoon. The Official Receiver does not bind himself to accept the highest or any tender.

Dated this 20th day of May, 1908.

J. GRANT GIBSON,  
Official Receiver and Trustee.

Byrom Street, Manchester.

## SALES BY AUCTION.

**VALUABLE** freehold Land to be Sold at Barking, with frontage to River Roding and Movers Lane, known as Movers Farm Estate; 32 acres; suitable for factories, dwellings, etc. Auction sale June 10 by Leopold Farmer & Sons, Factory Specialists, 46 Gresham Street, E.C., and Kilburn, N.W.

## SALES BY PRIVATE TREATY.

TO CHEMISTS AND DRUGGISTS.

**FOR SALE**, by private treaty, as a current going concern, the Business of Mr. J. Mason Metcalfe, at 60A Elswick Road, Newcastle-upon-Tyne, comprising Stock-in-Trade at or about cost, £237 7s. 5d., and Fixtures and Fittings; also, if required, the book-debts, £35 0s. 5d. The Business is an old-established one, and offers an excellent opportunity to anyone who will apply himself.

On view at the shop on Monday and Tuesday, the 25th and 26th inst., from 9 to 6. The premises comprise shop, two back shops, large yard, and dwelling-house above, with conveniences.

Apply to Robert Allen, Chartered Accountant, 24 Grainger Street West, Newcastle-upon-Tyne, who will receive offers up to Thursday, the 28th inst., at 10 o'clock.

## SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.

**RESULTS**  
OF ADVERTISING IN THIS  
SUPPLEMENT LAST WEEK *May 18/1908*

NATURE OF ADVT.	REPLIES
UNQUAL. ASSISTANT	27
QUAL. MANAGER	20
MANAGER	18
EXPORT CLERK	14
APPRENTICESHIP	13
BRANCH MANAGER	10

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**PHOTOGRAPHS AND TESTIMONIALS.**—Assistants should not send their photographs to advertisers of Situations Open unless they are specially requested to do so, and then enclose a stamp for return. In no case should the originals of testimonials be sent; copies suffice until negotiations are approaching completion, when the originals may be submitted at the employer's risk.

### RETAIL.

**ATH.**—Junior or Improver; Light Retail and Dispensing; outdoors. Age, height, salary required, and all particulars to F. Appleby & Co., 8 Argyle Street.

**IRKENHEAD.**—Assistant in good-class Dispensing business; outdoors; one only kept; half-holiday weekly. State experience and salary required, with references, to W. A. Wynne, F.S.M.C., Pharmaceutical Chemist, Rockferry, Birkenhead.

**BIRMINGHAM.**—Assistant, not over 28 (indoors), for good-class suburban business; easy hours; half-holiday weekly; three half-holiday alternate Sunday duty; progressive salary to one trustworthy and capable of taking charge. State fullest particulars, with references, and enclosing photo, to H. Critchlow, Chemist, 161 Monument Road, Edgbaston, Birmingham.

**BLACKPOOL.**—Junior required; one accustomed to Light Retail and Dispensing business; must be an active and obliging Salesman; good references; Extretor preferred, though not essential. Apply, with photo, references, and salary (outdoors), Oliver L. Jackson, Chemist, Church Street and North Promenade. Applications not answered in 3 days respectfully declined.

**BOLTON (Lanes).**—Outdoor; an energetic Counter Assistant, with thorough knowledge of Photographic trade; close 1 o'clock on Wednesdays. Waller & Riley, Ltd., Cash Chemists, Bolton, Lancashire.

**BOWNESS-ON-WINDERMERE.**—Wanted, Junior Assistant for Mixed Country business, used to Photography, for season only. State age, salary (outdoors), T. M. Holmes, Royal Square Pharmacy, Bowness-on-Windermere.

**BRIGHTON.**—Assistant, gentlemanly, age about 25 to 35; state full particulars, photo (if possible); half-day from 2 o'clock weekly; outdoors or indoors; state salary for both. "Dispenser" (24/35), Office of this Paper.

**BRIGHTON.**—Wanted, a qualified indoor assistant. Apply, stating height, salary required, enclosing photo, with full particulars, to Glaisyer & Kemp, 11 and 12 North Street, Brighton.

**BRIXTON, S.W.**—Wanted, smart Junior; about 23; must be a good counterman and steady worker. Mason, 89 Acre Lane.

**BROMLEY (Kent).**—Unqualified Assistant, immediately; gentlemanly and smart; abstainer preferred; outdoors; would wait a week or two for likely man. Usual particulars, salary required, H. Francis, M.P.S., 65 College Road, Bromley, Kent.

**BUXTON.**—An Assistant, about 24, for good-class Dispensing and Retail business. State salary and usual particulars, with photo, to A. Thresh, Buxton, Derbyshire.

**CAMBRIDGE.**—About middle of June, Senior Assistant; not under 26 years; must be a reliable Dispenser and used to a good-class business. Apply, with photo and stating salary required, etc., to Beall, 15 Chesterton Road, Cambridge.

**Ceylon.**—Qualified Assistant wanted for Colombo; aged about 24; single; good opening for suitable smart young man; short hours; good salary; healthy tropical climate. Apply, by letter only, giving full details of experience, to Dakin Brothers, Ltd., 82 Middelex Street, Bishopsgate Street, E.C.

**CHELTEMHAM General Hospital.**—Wanted, a non-resident Dispenser; must be a member of the Pharmaceutical Society; salary £90, rising to £100. Applications, stating age and experience, to be sent to the Secretary, from whom particulars of the post may be obtained. Personal canvass of the Governors is expressly forbidden.

**CLACTON-ON-SEA.**—Qualified Assistant; outdoors; 23 to 28; unmarried; permanency or four months' season engagement entertained; Optical and Photographic knowledge desirable. State full particulars, salary required, etc., in first letter, and enclose photo, W. Maskew, F.S.M.C., Pharmacist, Clacton-on-Sea.



# SITUATIONS OPEN *(continued).*

**COVENTRY.**—Henry Welton has a vacancy for a gentlemanly Assistant; indoors; must be well up in Dispensing. Apply, stating age, height, experience, references, and salary required and send photo (to be returned).

**CREWE.**—Assistant (qualified), outdoors, reliable, wanted about June 1 for brisk Cash business, Photographic, Agricultural; excellent references; half-holiday; no Sunday duty; hours 8 to 8.30, Fridays 9.30, Saturdays 11; photo if possible (to be returned). Galloway, Cash Chemist, Crewe.

**EASINGWOLD (Yorks).**—Junior, for three weeks, commencing June 5; Mixed country business; hours 8 to 7.30 (Saturday 8.30); no Sunday duty; outdoors; work light. Apply, with references from last two employers, to F. E. Rookledge, Chemist and Newsagent, Easingwold.

**EASTBOURNE.**—Assistant wanted, accustomed to high-class Dispensing and Retail business; must have knowledge of Photography. Apply, with full particulars as to age, experience, salary (outdoors), with photo (if convenient), to J. F. Andrews & Co., Carlisle Road, Eastbourne.

**EXETER.**—Wanted, at once, capable Junior Assistant; outdoors; short hours; weekly half-day. State salary required, age, experience, etc., and enclose carte, Sloman, Southernhay Pharmacy, Exeter.

**FOLKESTONE.**—A smart Junior, for good-class Cash business; knowledge of Photography essential; indoors; permanency. Price, M.P.S., Tontine Street.

**GRIMSBY.**—Wanted, a Junior or good Improver for brisk up-to-date business; hours 8 to 8; 1 o'clock Thursdays, 10.30 Saturdays; no duty. Address full particulars as to salary, etc. (outdoors), to Stevenson 5 Victoria Street, Grimsby.

**HAMPTON COURT.**—Wanted, Assistant, about 22 (indoors), middle of June, with knowledge of Dispensing and Photography. Apply, with full particulars and salary required, J. S. Wellburn, Bridge Road, East Molesey.

**HANLEY.**—Junior or Improver wanted in Light Retail and Dispensing business; knowledge of Photography essential. Apply, stating age, height, references, etc., to John Tirrell, Market Square, Hanley, Staffs.

**HIGH BARNET, N.**—Wanted, qualified Assistant (outdoors), under 30; good all-round man, a practical knowledge of Photography essential. Apply, stating age, height, experience, salary required, and enclosing photograph if possible, to Edwards, Chemist, High Barnet, Herts.

**IPSWICH.**—Wanted, at once, Assistant; about 21; knowledge of Photography preferred. Apply, giving particulars as to age, height, references, salary (outdoors), enclosing photo (to be returned), to Symonds, 16 Upper Brook Street, Ipswich.

**KENSINGTON.**—Junior Assistant (indoors) wanted, about June 1. State age, height, experience, references, and salary, or apply personally, Davis, 4 Stratford Road, Marles Road, Kensington (midway between Earl's Court and High Street Kensington Stations).

**KENT.**—Qualified Assistant wanted for Light Retail, Dispensing, and Photographic business; age 30 to 40; permanency if suitable. Apply, stating age, salary required, and usual particulars to 26/22, Office of this Paper.

**LIVERPOOL.**—Junior Assistant (outdoors) wanted, June 1. State age, height, experience, etc., and enclose photo, to Hudson, Chemist, 111 Prescott Road, Fairfield, Liverpool.

**LONDON, W.**—Assistant; qualified; used to quick Store trade; knowledge of Photography essential. Full particulars as to age, height, experience, and salary required, to "Sajodin" (24/26), Office of this Paper.

**LONDON, W.C.**—Trustworthy Assistant (outdoors) wanted, with fair experience; knowledge of Prescribing and Photography; whole day off weekly; part-time if desired. Full details, with salary required, to Jones, 78 Long Acre.

**LONDON, N.**—Assistant; indoors; salary £40 to £50, according to experience; hours 8.30 A.M. to 10 P.M.; two evenings from 6 P.M. or half-day off weekly; alternate Sunday duty from 6 to 10 (evening only). Apply, stating experience, when disengaged, and giving names of references, "Chemist," 115A Stoke Newington Road, N.

**LONDON, W.**—Wanted, a Junior Assistant (indoors), accustomed to good-class Dispensing business. W. McEwen, 17 Craven Road, Hyde Park, W.

**LONDON, N.**—At once, qualified man as Manager; aged 25; good salesman; well up in Photography and Dispensing. Long, 128 Upper Clapton Road, N.E.

**LONDON, W.**—Wanted, at once, qualified Junior, accustomed to high-class Store trade; 3 kept. "Rex" (204/65), Office of this Paper.

**MAIDSTONE.**—Improver or Junior; about 18-20; half-day weekly no Sunday duty; time for study; good opportunity for one wishing to qualify; live in. State salary required and full particulars to F. H. Roweroft, Chemist, 66 Week Street, Maidstone.

**MANCHESTER.**—Wanted, at once, smart Assistant (qualified or unqualified), age about 27 to 30, for quick Cash business; must be first-class counterman, good window-dresser, and have excellent references; outdoors. Apply, giving salary required and fullest particulars, to "Adaptable," e/o Messrs. Woolley's, Victoria Bridge Manchester.

**MANCHESTER District.**—Immediately, for good-class Dispensing business, until sold, qualified Manager; must be accurate Dispenser and have exceptional character; to save time state age salary, references, and all particulars in first instance. "Cito" (24/16), Office of this Paper.

**NATAL.**—Qualified Assistant required for Durban; capable man age about 25; one who has had experience in the West-end of London and with a general knowledge of Photography preferred salary, first year £200, second £212, third £224 per annum, with furnished bedroom on the premises; second-class passage paid three years' agreement to be signed. Write, with full particular of experience, to "V. N." (197/58), Office of this Paper.

**NEWCASTLE-ON-TYNE.**—Wanted, qualified Junior Assistant for Dispensing counter; indoors. Apply, stating age, experience and references, with photo (to be returned), to Brady & Martin, Ltd. Northumberland Road, Newcastle-on-Tyne.

**NORTH YORKSHIRE.**—Manager (qualified), for Mixed business Extractor, Photographic, Retail. Apply, giving particular of experience, salary, and when at liberty, 24/18, Office of this Paper.

**OLDHAM.**—Wanted, Junior or Improver (outdoors) for quick business; half-holiday; no Sunday duty. State experience and references, with photo, 24/5, Office of this Paper.

## PARISH OF ST. PANCRAS, LONDON. DISPENSER.

**WANTED**, for the Workhouse and South Infirmary of this Parish Pancras Road, N.W., a Dispenser; inclusive salary £120 per annum, rising after four years to £140 per annum, and then by increments of £10 every two years to £180 per annum. Candidate (male or female) to be eligible must not exceed the age of 35 years, and must possess the Major or Minor qualification of the Pharmaceutical Society of Great Britain. Applications to be made on form to be obtained at my office as below. Selected candidates will be informed when and where they may attend a meeting of the Guardians. Alfred A. Millward, Clerk to the Guardians, Town Hall Pancras Road, N.W., May 16, 1908.

**ST. MORITZ (Switzerland).**—Qualified English Chemist required for June 1st; extra language and Continental experience an advantage; salary 300 francs per month; travelling allowance 12 francs. Full particulars in first letter to International Pharmacy

**SHREWSBURY.**—Wanted, by June 10, a Junior Assistant; qualified for registration as student-associate. Apply, with references, W. Gowen Cross & Son, Shrewsbury.

**TAVISTOCK.**—Immediately; a competent Junior for Light Retail and Dispensing. State full particulars and salary required (outdoors), Doble, Tavistock.

**WARE.**—Wanted, Junior or Improver, with a knowledge of Photography, for a good-class Family and Dispensing business; easy hours; half-a-day off weekly; no Sunday duty; indoor or outdoors. State salary required, and give full particulars and references and when disengaged to Woollett & Coggin, Chemist, Ware.

**WARWICKSHIRE.**—Qualified Assistant wanted, about June 1 reliable Dispenser, quick at counter, good address, references exemplary; half-holiday; no Sunday duties. Applicants state salary required and references, "Photograph" (26/24), Office of this Paper.

## WEST DERBY UNION, LIVERPOOL.

**THE** Guardians require the services of an Assistant Outdoor Dispenser; salary £104 per annum; Pharmaceutical Society qualification. Applications, stating age, present employment, etc. to be sent to me not later than Monday June 1, 1908. Harris & Cleaver, Union Clerk, Union Offices, Brougham Terrace, Liverpool, May 20, 1908.

**WEST-END** Pharmacy requires Junior or Improver for stock work, window-dressing, and with some Dispensing. State full particulars of experience and salary required (outdoors) to 23/ Office of this Paper.



**WEST-END.**—Senior Assistant; qualified; indoors. Apply personally or by letter, with particulars as to previous experience, salary required, and photo (if possible) to Hooper, Struve & Co., Ltd., 7 Pall Mall, S.W.

**WOODHALL SPA.**—At once, for season, Junior or Improver; indoors. State salary required and enclose photo, Carlton & Sons, Horncastle and Woodhall Spa.

**ASSISTANT;** indoors; abstainer; qualified preferred; if unqualified not under 24; half-day off weekly. Full particulars as to salary, etc., with photo, to Topholme, Earl's Court, London.

**DISPENSER** and bookkeeper (qualified man); not a medical man nor a medical student. Apply, by letter only, to "B. W. B.," 194 Hammersmith Road, W.

**GOOD Junior** (indoors), age about 22, for high-class Cash and Dispensing business in North-West suburb. State age, height, references, photo (to be returned), "X. Y. Z.," c/o John Bell & Co., Oxford Street, W. Half-holiday weekly.

**IMMEDIATELY.**—A smart qualified man to manage a small neglected branch single handed; must be active, have knowledge of Photography, Agriculture, and good Prescriber; abstainer; single. Apply, with photo (if possible), stating age, height, experience, salary required, and references, to Jeanes, Chemist, Weymouth.

**IMPROVER** or Junior wanted, about Whit week; age about 19; must be trustworthy, obliging, for quick Counter Light Business, suburb Midlands; good reference essential; outdoors; some Photographic knowledge preferred. Apply, giving full particulars (C.D.V. returned), salary required, to 24/10, Office of this Paper.

**ASSISTANT;** indoors; abstainer; qualified preferred. Full particulars as to salary, etc., with photo, "N.," c/o Willows, 40 Aldersgate Street, E.C.

**LEWIS & BURROWS** have a vacancy for a first-class qualified Counterman for the West-end. If application is made by letter, please enclose photograph and full particulars to 22 Great Portland Street, W.

**MANAGER.**—Thoroughly capable, active, and experienced man wanted to take charge of the Chemical and Drug Department of a large London Stores; must produce undeniable testimonials as to capacity, initiative, character, etc. State age and salary expected to "B. M. X.," c/o Street's, 42 Albemarle Street, W.

**MANAGER** (qualified) wanted, at once; good Dispenser; practical knowledge of Photography essential; married. Please give full particulars of experience, and state age, height, and salary, to "R. W." (25/40), Office of this Paper.

**OUTDOOR.**—Wanted, after Whitsuntide, a smart competent Assistant; qualified; good window-dresser, and with knowledge of Photographics; must be under 30 years of age. Give particulars of experience, reference, salary required, and photo (if possible) to Fleet, Chemist, Rugby.

**PART-TIME** wanted; very suitable for a Minor Student; state experience and salary; a personal interview preferred. Apply or call at 3 Mortlake Terrace, Kew, Surrey.

**PART-TIME.**—A reliable Assistant, with good experience, for two half-days and each evening from 5 P.M. Apply, giving full particulars and salary expected (enclose photo if writing), to "Chemist," 137 Lewisham High Road, S.E.

**QUALIFIED Manager** immediately, for Mixed Retail in Yorkshire; must be good Prescriber, preferably able to Extract, but not essential; married man preferred, to live on premises; house and gas free. Apply, stating age, experience, references, and salary required, "Salot," c/o Messrs. Raimes & Co., Wholesale Druggists, York.

**QUALIFIED Assistant;** between 20 and 30; outdoors; immediately or very shortly, for good country business near sea; comfortable berth for suitable man. Send every particular, with photo, to "Veronal" (25/32), Office of this Paper.

**QUALIFIED Assistant** wanted. "S. W." (204/59), Office of this Paper.

**REQUIRED,** at once, for Malden, Surrey, qualified Manager to work up Branch; must be young and energetic and have excellent references. Apply personally, or if by letter give full particulars of experience, age, height, and salary required (outdoors) to G. A. Sanderson, 27 Northcote Road, Clapham Junction, S.W.

**WANTED,** about middle of July, experienced Assistant; accustomed to brisk Cash trade. Apply, enclosing copy of photo, to be returned, 202/33, Office of this Paper.

**WANTED,** qualified Lady Dispenser by doctor; domesticated; salary £2 a month; board and lodging, no laundry. Apply, with photo and references, "X. Y. Z." (202/60), Office of this Paper.

**WANTED,** Junior Assistant or Improver, chiefly for putting up stock and orders for branch shops; half-holiday weekly; no Sunday duty; indoors. Apply, with full particulars, to Prichard, Chemist, Abertillery.

**WANTED,** May 29, a qualified Assistant for the Mixed trade in a working-class district, and we include Colours, Varnishes, etc., in small quantities; no Sunday duty; Thursday half-holiday. State age, salary required, and addresses of the last three situations, for strictest investigation, Exor. of Joseph Watts, 596 Attercliffe Road, Sheffield.

## WHOLESALE.

**LANCASHIRE** firm have vacancies for Representatives; salary £150 and travelling allowance £2 10s. weekly; commission over fixed turnover. Full particulars, in confidence, 201/59, Office of this Paper.

**PHARMACIST,** with knowledge of European languages, required in literary department of Wholesale firm. State age, experience, languages, and salary required to "P." (201/2), Office of this Paper.

**PILL** and Tablet maker; also one or two Assistants in Laboratory; experience essential. State full particulars and wages required, Hough, Hoscason & Co., Holland Street, Pendleton, Manchester.

**QUALIFIED Chemist.**—A vacancy occurs on the staff of a London firm of Manufacturing Chemists for a young Chemist; age about 23; an excellent opportunity for a man of energy and ability to acquire a thorough training in the Wholesale. Apply, stating age, previous experience, salary required, etc., to "Q." (203/38), Office of this Paper.

**QUALIFIED Manager** required for Wholesale Drug warehouse; good but tactful disciplinarian; commencing salary £3 per week, with early prospect of advance if suitable. State age, experience, and all customary information to "D. M." (22/28), Office of this Paper.

**REPRESENTATIVES** wanted, for all districts, to sell a known brand of Eau de Cologne on 10 per cent. commission. Please state ground covered and references (which will be treated in strictest confidence), "Farina" (202/43), Office of this Paper.

**REPRESENTATIVES** required by a firm of Manufacturing Chemists to carry as a Side-line, among Chemists, Druggists, and Manufacturing Confectioners, Synthetic Essential Oils; first-class references required. Apply 201/36, Office of this Paper.

**TRAVELLERS** wanted, with good connections among Chemists in the Provinces, Scotland, and Ireland, to carry a small, high-class, patented article as a Side-line; good commission. Write (in confidence), stating district covered, to Managing Director, The Offord Patent Hygienic Truss Co., Ltd., St. Andrew's Street, Cambridge.

**WANTED,** a Representative with a present connection among all the best Chemists in the South of England, to sell "Salothyme" Toilet Specialities. Write, giving full particulars of present and past employment and salary required. No application entertained unless can give highest references, both as to ability and integrity. 205/62, Office of this Paper.

## PARTNERSHIPS.

**GENTLEMAN** of considerable experience, smart and energetic, seeks position in Wholesale Drugs or Sundries; Manchester district preferred; would invest £200 with good firm. Apply, 21/17, Office of this Paper.

**QUALIFIED Dentist** wanted to occupy part premises, and who would mutually invest in starting a Practice; excellent opportunity for young gentleman with moderate capital; splendid position, and, with ordinary ability, guaranteed success. Apply, with full particulars, to "Dentist" (26/20), Office of this Paper.

## FOR SALE.

**BARGAIN.**—Complete and handsome Fittings by Maw's, as new; window-enclosure, 7 ft. 5 in., height 8 ft.; run of shelves and 12 ft. of wall-cases, mirror-backed throughout; counter, drawers, cupboards, etc.; low price to quick buyer; may be seen, London, W.C. 28/6, Office of this Paper.

**MAHOGANY** nest drawers, glass labels and knobs, £7 10s.; dispensing screen, mirror centre, £4 15s.; bent-glass mahogany case, £1 15s.; counter, mahogany top, cased front, 9 ft., £6; wall case, £5 10s.; mahogany upright case, 4 ft., £1. F. W. Smith, 3 Belgrave Terrace, Leeds.

**STOCK,** Fittings, Sundries, Fancy and Toilet Goods of large Chemist's shop to be Disposed of; offers invited for anything; mirrored-glass mahogany counter-screen 94 by 27, mahogany cash desk with show-case front, large iron mortar and pestle, drug-grinder, ½ h.p. water motor, etc. "Chemist," 4 Horninglow Road, Burton-on-Trent.



# SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words beyond, prepaid.

## RETAIL.

**L**ADY Dispenser; Locums or permanency; hospital experience. 21/14, Office of this Paper.

**M**ANAGER or Locum; disengaged end June; excellent references. 23/1, Office of this Paper.

**A**S Assistant; Mixed trade, Prescribing, Extractions, etc. "Statin," 2 Hallfield Road, Bradford.

**A**PPRENTICE; 17; passed Preliminary; good references. Pomerantz, 36 Brick Lane, London, E.

**L**ADY Dispenser; qualified; experienced; doctor or institution. "R. P.," 52 Elgin Avenue, Maida Vale, W.

**L**OCUM; qualified; first-class experience; disengaged early in June. "Chemist," Foley House, Malvern.

**M**AJOR; 23; good experience; Photography; outdoors. G. A. Bell, Barrington Crescent, Stockton-on-Tees.

**A**SSISTANT; qualified; 12 years' good-class Retail and Dispensing experience. Burke, Grafton House, Eaton Road, Margate.

**M**ANAGER or Assistant; unqualified; 28; reliable, energetic, good worker. Apply, "Trustworthy," 54 Derby Road, Croydon.

**Q**UALIFIED Chemist (28), wide experience, desires Retail work in the evenings; North London preferred. 18/39, Office of this Paper.

**M**AJOR; 25; accurate Dispenser; fluent French; outdoors; London or Continent preferred. D. Beauverd, 27 Clifton Crescent, Folkestone.

**Q**UALIFIED; 27; Locum; good Dispensing and Photographic experience; disengaged about June 15; London preferred. "H. H.," 34 Leinster Terrace, W.

**U**NQUALIFIED; temporary or permanent; outdoors; 25; Store experience; 3 years London; Photography; disengaged. "W.," 82 King Street, Southsea.

**Q**UALIFIED Chemist (30), single, Scotsman, wishes Management; London experience 10 years; good references. "J. C.," 46 Kenwyn Road, Clapham, S.W.

**A**SSISTANT; 25; unqualified; good Counter, Dispensing, and Store experience; London; outdoors preferred; good references. Angus, 58 Moscow Road, Bayswater.

**L**OCUM; aged 44; qualified; Optics, Photography, Extraction: A1 experience; exceptional reference; at liberty June 5. Apply, Brown, The Pharmacy, Pangbourne, Berks.

**J**UNIOR (23), tall, steady, and reliable, requires engagement in good-class Retail and Dispensing business; outdoors preferred. "Aspirin," Richmond House, Harle Street, Neath.

**M**ANAGER of Branch or principal's Locum.—An experienced Pharmacist with good testimonials, in Light Retail and Dispensing. Brown, 1 Marlborough Hill, Harrow.

**I**TALIAN Pharmaceutical Chemist, aged 27, tall, excellent testimonials, fluent French, English, Dispensing experience, desires position as Assistant. Address Stella, 7 Via Serragli, Florence (Italy).

**D**OCTOR'S Dispenser or Part-time Chemist; accurate, tall, gentlemanly, educated; completing four years' apprenticeship to Doctor and Chemist conjointly; moderate salary. Preston, Armagh.

**M**ANAGER, qualified (33), abstainer, married, thoroughly reliable and trustworthy, seeks permanency in Management of Mixed Retail; highest references. "W. G.," 3 High Street, Wainfleet, Lincs.

**M**ANAGER; qualified; thoroughly reliable and energetic; married; Extractor; experienced Dispensing, Prescribing, and Counter; West of England or South Coast preferred; disengaged month. "G. E. M.," (22/30), Office of this Paper.

**G**ERMAN Chemist (23), examined, good knowledge of English, experience in Photography, etc., seeks any employment in Great Britain or abroad; excellent references; small salary or at first as volunteer. Address, Herbst, 2 Torrington Square, London, W.C.

**U**NQUALIFIED; 28; good references and experience; no Stores. 26/16, Office of this Paper.

**L**OCUM or Branch Manager; disengaged; registered; references. "X.," 52 North Road, Cardiff.

**A**SSISTANT or Manager; outdoors; qualified; good Dispenser. Long, 108 Swinley Road, Wigan.

**L**OCUM; experienced; excellent references; open to engagements. Silas, 2 Eaves Terrace, Blackpool.

**Q**UALIFIED; 24; good Dispenser; outdoors; London preferred. Johnson, 21 Oakley Crescent, Chelsea.

**L**ADY Dispenser; qualified; Chemist or Doctor; Sheffield district preferred. 25/25, Office of this Paper.

**B**RANCH Manager or Assistant; experienced; highest references; permanency. 25/27, Office of this Paper.

**A**SSISTANT or Branch; 30; unqualified; South Coast preferred. Frank, 133 Kingston Road, Portsmouth.

**P**ERMANENCY or Locum; outdoors; London; experienced. "Qualified," 13 Trafalgar Square, Chelsea.

**A**SSISTANT; experienced; unqualified; disengaged; permanency preferred. Dewar, 19 Helen Street, Woolwich.

**A**SSISTANT; 35; capable Dispenser and Counterman; unqualified. "Metol," J. Gibbs, Sourhall, Todmorden.

**C**OMPETENT Manager, Assistant, or Locum; married; active; moderate salary. "B.," 127 Acton Lane, Chiswick.

**A**SSISTANT; 35; capable, experienced Dispenser, Prescriber, and Counterman; unqualified. 24/11, Office of this Paper.

**S**ENIOR or Manager; 27; qualified; experienced; highest references; provinces preferred. 23/40, Office of this Paper.

**M**ANAGER or Senior; 29; qualified; all-round experience; Yorkshire (West Riding) preferred. 24/33, Office of this Paper.

**A**SSISTANT, experienced, as Manager, Locum, or Dispenser; disengaged. "H. G.," 6 Willow Avenue, Barnes Common, S.W.

**P**ART-TIME; perfect French, fair German; Exhibition offer considered. Billington, Rutland House, Spring Gardens, Leek, Staffs.

**A**SSISTANT; unqualified; good experience and references; Photography; outdoors; disengaged May 30. 24/8, Office of this Paper.

**L**OCUM TENENS; 27; qualified; 6 years' experience and references, all branches; French; moderate. T. H. Buswell, Lutterworth.

**Q**UALIFIED; 9½ years' good-class all-round town and country experience; good references. "Reliance" (24/40), Office of this Paper.

**R**ELIABLE Manager for good-class business; first-class experience; qualified; good references; disengaged; town or country. State salary, 26/32, Office of this Paper.

**H**OSPITAL, Institutions; holiday dates fixed up by registered Chemist and Druggist; London and country references. "M.P.S.," 31 Cambridge Road, Sideup, S.E.

**E**XPERIENCED, reliable, married Dispenser requires engagement with Medical Practitioner, Dispensary, etc.; good recent references. "N. J.," 6 Warrington Road, Ipswich.

**L**OCUM or permanency.—Assistant; unqualified; 24; first-rate experience, Coast Dispensing and country; well recommended; disengaged shortly. Robertson, Crewkerne, Somerset.

**M**ANAGER; middle-aged and active; town or country; exceptional experience; business with scope for increase and improvement entertained on mutual conditions. "M.P.S." (23/37), Office of this Paper.

**M**ANAGER; Branch or small business; view early succession preferred; London, Midlands, or large industrial town; working and middle class General Retail, Prescribing, Extraction; opening for Dentistry; interview. "Primus" (23/38), Office of this Paper.



**L**OCUM or Temporary Manager; disengaged. Bates, Chemist, 53 Lexden Road, Colchester.

**D**ISPENSER; part or whole time; good references; disengaged. "S. S.," 175 Kennington Road, S.E.

**P**ART-TIME; unqualified; 26; excellent references. Matthews, 7 Derby Street, King's Cross, London.

**L**OCUM; qualified; excellent references; disengaged. Caius, 21a Castletown Road, West Kensington.

**A**SSISTANT; tall; Photography, Optics; abstainer; expert; disengaged. Sidney, 15 Howland Street, W.

**A**SSISTANT, Branch Manager, or Locum; experienced; highest reference; disengaged. "P.," 13 Ingersoll Road, W.

**A**SSISTANT or Locum; 30; unqualified; Photography; good references; abstainer. "B.," 55 Old Steine, Brighton.

**P**ART-TIME; two or three evenings a week; Dispensing, Prescribing, general experience. 27/12, Office of this Paper.

**F**RANCIS & CO., Chemists, Wrexham, can recommend a young man as Junior or Improver; civil, steady, and most obliging.

**A**SSISTANT (32) seeks engagement; capable taking charge; unqualified; excellent references. 27/23, Office of this Paper.

**T**EMPORARY management or Locum; experienced; energetic; reliable; disengaged. "Statin," 3 High Street, Clapham.

**U**NQUALIFIED; 26; tall; gentlemanly; thoroughly recommended; permanent or Locum. 27/32, Office of this Paper.

**A**SSISTANT; 28; experienced Dispenser, Counterman; Photography; disengaged. "T.," Clovelly, Buxton Road, Croydon.

**D**ISENGAGED; smart, experienced; Store trade; salesman; Dispenser; Dentistry. "Extractor," 199 Scott-Ellis Gardens, N.W.

**D**ISPENSER-SURGEON; Part-time student free from 5 p.m.; London or district; excellent references. 27/17, Office of this Paper.

**Q**UALIFIED Manager, suitable for large establishment; steady, active; undeniable testimonials. "L." (27/34), Office of this Paper.

**M**ANAGER or Senior Dispenser; qualified; 30; first-class experience in West-End. Macintosh, 39 St. Paul's Road, Canonbury, N.

**Q**UALIFIED Manager or Locum by energetic middle-aged man; good references; town or country. Address "Veritas," 80 Clerkenwell Road, E.C.

**M**ANAGER, with City and suburban experience, young and reliable, is open to fix up immediately with any good offer. 28/17, Office of this Paper.

**M**ANAGER (Branch); experienced, capable Extractor, Dispenser, good Prescriber; outdoors; shortly disengaged. "Max" (27/21), Office of this Paper.

**L**OCUM or Branch Manager; qualified; disengaged; experienced in good General and Dispensing business. S. V. Holgate, 2 Peveril Drive, Nottingham.

**A**SSISTANT (26) requires berth; outdoors; Optical, Counter, Dispensing, Photographic; well recommended. "Rhei," 57 Mexfield Road, East Putney, S.W.

**M**ANAGER, town or country, qualified, married, reliable, 15 years' experience, seeks permanency; North preferred. "W. A.," 39 Market Place, Barnard Castle.

**S**ENIOR Assistant or Manager; aged 37; height 5 ft. 10 in.; disengaged May 30; Liverpool district preferred, but not essential; Prescriber, Extractor, etc.; well recommended. "H.," c/o J. Milling, Chemist, Northgate Street, Chester.

## WHOLESALE.

**L**ONDON Manager recommends smart young Chemist as Traveller; age 28. "Ambition" (20/31), Office of this Paper.

**W**ANTED, situation in Wholesale; 6 years' first-class experience; also Retail; aged 29. 26/11, Office of this Paper.

**T**RAVELLER; energetic and good salesman; sound connection; expenses and commission. 22/27, Office of this Paper.

**A**s Controller, Stockkeeper; any capacity; unqualified; 24; 8 years' good experience and references. 23/20, Office of this Paper.

**C**HEMICALS, Drugs, etc.—Capable hand, competent to manage department, requires situation; 29; single. 23/31, Office of this Paper.

**T**RAVELLER, with connection London and Provinces, wants one or two good Side-lines. Address, Andrews, 10 Alexandra Road, Finsbury Park, N.

**D**RUGGIST'S Representative, several years with firm of highest standing, wishes to re-engage with first-class house; important connection. 27/31, Office of this Paper.

**G**ENTLEMAN desires position as Drug and Sundries Traveller; North England preferred; or would introduce high-class speciality. "Radix" (26/12), Office of this Paper.

**A**s Manager, or Chemist and Manager of Wholesale Drug, Chemical or Allied Works at home or abroad; good organiser and disciplinarian. "F. C. T.," (24/30), Office of this Paper.

**Q**UALIFIED Chemist (26) seeks appointment in Laboratory of good Wholesale firm; at present in Hospital practice; disengaged middle of July. "Argyrol" (25/18), Office of this Paper.

**A**DVERTISER, who has just terminated his engagement with Parke, Davis & Co., as Representative for Italy, would like to correspond with a good English or American house. Dr. Lazi, 38 Via Sette Salle, Rome.

**A** SPANISH Pharmacist, speaking English (23), desires employment in the Laboratories of a Wholesale house; nominal salary to commence with; would help in Spanish correspondence. "L. F.," 70 Camberwell Grove, S.E.

**C**LERK (22), shorthand typist, French and German correspondent, bookkeeper, 6 years in office of Wholesale Druggists and Chemists, first-class testimonials, seeks situation at home or abroad. 21/18, Office of this Paper.

**O**PPORTUNITY in Wholesale Drug Proprietary; any position with scope for demonstration; Advertising, Sales, Correspondence; aged 30; 13 years Retail; would go abroad. "Non-Reg." (18/31), Office of this Paper.

**E**NGINEER (first-class Working) desires engagement; experienced in making Compressing, Grinding, and Mixing Machinery, Moulds, etc.; 5 years with Burroughs Wellcome & Co. "M.," 137 Turners Road, Burdett Road, E.

**T**RAVELLER (33), well-known man, good connection among Chemists in Durham, Northumberland, and Yorkshire (North), is open for really good saleable Side-lines; 15 years' excellent character and experience. 21/36, Office of this Paper.

**|| AN OPEN ADVT. TO MANUFACTURERS AND OTHERS.**

**I WANT AN INTERVIEW!**

**DO YOU WANT?**

**A**  
MANAGER \_\_\_\_\_  
WORKS MANAGER \_\_\_\_\_  
ASSISTANT MANAGER \_\_\_\_\_  
HEAD OF DEPARTMENT \_\_\_\_\_

**CAPABLE OF**

**|| INITIATIVE  
ASSUMING RESPONSIBILITY  
CONTROLLING EMPLOYEES  
ORGANISATION ||**

**FAMILIAR WITH**

**MOST OF THE UP-TO-DATE TIME  
SAVING DEVICES—AND ABLE TO  
USE THEM.**

**AT YOUR DISPOSAL:—**

**UNBOUNDED ENERGY,  
ORIGINAL IDEAS,  
TRANSCENDENCE,  
TRUSTINESS, &c., &c.**

**INCIDENTALLY—I MENTION THAT  
I AM A C. & D.**

**WRITE BRAIN, 193/65**

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**c/o C. & D.**



## AGENCIES.

A FIRM of Merchants, with offices in the City, are open to take up further Agencies for articles of interest to the Drug and Chemical trade. Apply, Graham, 19 Cragierne Road, Blackheath.

AGENT wanted, for the sale of Novelties to Chemists, Drug-stores, etc.; only men knowing the line need apply to C. D. 1383, c/o Haasenstain & Vogler, A.-G., Cologne, Germany.

MAN (trustworthy) desirous of engaging part of his attention to a remunerative employment, should apply for particulars of high-class Agency. Address, 23/6, Office of this Paper.

## MISCELLANEOUS.

**MACADAM & TUCKNISS**, Sharedealers, 30 Tranquil Vale, Blackheath, S.E. Telephone 81 Lee Green.

**SHARES FOR SALE** (free of commission, subject).—50 Barclay & Son's preference, 12s., paid 4s. 6d.; 50 Benger's Ordinary, 28s. c.d.; 170 Camwal Ordinary, 3s. 6d.; 40 Preference, 10s. 9d.; 100 J. C. & J. Field Ordinary, 4s. 4d.; 40 Lewis & Burrows Ordinary, 5s.; 38 Meggeson Ordinary, 20s.; 100 Sanitas, 21s. c.d.; 200 Schweppe's Deferred, 7s. 3d.; 200 A. J. White Ordinary, 3s. 3d.

**WANTED** (subject).—3 Camwal Debentures, £34; 120 J. Knight Ordinary, 21s. 3d.; 30 Evans Lescher & Webb Preference, £5 5s. 6d.

List of shares for sale and wanted sent free on application. Bankers: London and County. Established 1898.

## HAVE YOU EVER

gone into the pros and cons of Optics and Sight-testing as a profitable addition to your business? Write for particulars of how you can make this side-line pay you well. Fee for complete Course, £2 2s. Thorough tuition guaranteed, otherwise fee returned.

*G. E. Bamister* Practising Optician, BLOXWICH.

**CHEMISTS' SHOP-FITTINGS (SECOND-HAND).**—Ranges mahogany drawers, with bevelled-edge glass labels and out-glass knobs, shelving above, lockers below; mahogany dispensing-screens, counters with glass-case fronts, wall-cases, bent-front and flat-top counter-cases, counter-desks, tooth-brush cases, complete shop-rounds, etc.; every requisite for chemists; extensive stock to select from at extremely low prices; practical men sent to all parts; illustrated catalogues and estimates free. **MATTHEWS, CHEMISTS' FITTER**, 14 and 16 MANCHESTER STREET, LIVERPOOL.

**SECOND-HAND CHEMIST'S FITTINGS.**—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, **RUDDUCK & CO.**, 262 OLD STREET, LONDON, E.C.

**TO Chemists and Druggists.**—Second-hand 12-ft. Drug Fitting, Drawers, Cupboards, Lockers, Shelving, Mirror, Poison-cup-board, cornice, 4-ft. Dispensing-screen and Counter, 8-ft. Glass-fronted Serving-counter, under Counter Drawers, 5-ft. Mahogany Bent Plate-glass Counter-case, Perfumery case and Desk, 6-ft. Wall-case; all high-class condition; the lot £47 10s.; bargain; cheap house for alterations, Window-enclosures, Glass Facias, Stall-plates; estimates free. **H. Mills, Chemists' Complete Shopfitter, Shop-front Builder, Steam Works**, 163-5 Old Street, London, E.C.

**SECOND-HAND SHOP-FITTINGS.**—10-ft. drug-fitting, with lockers and mahogany fronted drawers, glass labels and knobs, mahogany coverboard and cornice, and mahogany fronted pilasters and shelves; 8-ft. mahogany and plate-glass fronted serving-counter; 4-ft. mahogany and plate-glass counter-case; perfume case and desk; 7-ft. mahogany screen, with plate-glass bevelled mirror centre and cases each side; counter under same with plate-glass cases in front; 6-ft. wall-case, opening in front with three glass doors, and fitted inside with shelves; nest of 10 drawers for behind counter; ready for immediate despatch; price, complete, £39 10s. **PHILIP JOSEPHS & SONS**, 93 Old Street, London, E.C.

## YOU WILL SAVE MONEY!

If you buy your Machinery Oil from us we can supply first-class quality at 1s. per gallon. There is no necessity to pay more. Send along your enquiries to-day. Sample on request.

**THE COUNTY CHEMICAL CO., Ltd.**, Manufacturing Chemists and Oil Refiners.  
Excelsior Works, BIRMINGHAM.

**ARTIFICIAL TEETH. PAINLESS EXTRACTIONS.**—Chemists wishing to take up this profitable Side-line should communicate with T. Barton, Mechanic to the Profession, 194 Mansfield Road, Nottingham; thorough tuition in all branches of the work; mechanical, operating, gas administration, stoppings, etc., in first-class operating room and workshops. Numerous testimonials from Chemists.

**WHOLESALE** wanted to sell our Bolio non-poisonous disinfectant in 1d., 2d., 3d., and 6d. bottles; also other packed goods for wholesaling. Write, **A. S. Morrish & Co.**, 108 Duke Street, Liverpool.

## TO MANUFACTURERS.

It is worth while to consider the possibilities of establishing a factory at Capetown, the gateway of South Africa.

For particulars, address the **TOWN CLERK, CAPETOWN.**

**SPLENDID** success of my new designs in Window-tickets; congratulations immediately followed delivery of orders; nothing else like them, and still beating my own records; 5 by 4, 8 for 1s.; 8 by 5, 7 for 2s.; 10 by 8, 4 for 2s.; your wording in 3 colours; samples 3d., 5d., and 9d. each. Address, "Ticket" (25/5), Office of this Paper.

## HAVE YOU SEEN THAT

one page advert.? It is page 17 this issue. My message to you and the chemists throughout the world is thereon. Please fully understand that I have my limits and cannot book clients by the hundred, so clients at one and the same time is enough worry for any one man. That's my limit, so write for booklet now, it will sometime be TOO LATE. Every pharmacy personally visited now.

**BERNARD SLACK**, Hill Top, WEST BROMWICH.

## Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Tuesday, May 26.

**Brañford Chemists' Association**, Royal Hotel, at 9 P.M. Annual meeting.

Wednesday, May 27.

**Western Chemists' Association**, Tudor Hotel, Oxford Street, London, W., at 9 P.M. Annual meeting and election of committee. Mr. C. T. Allen will give an address on "Ways and Means of Co-operation between Physician and Pharmacist."

**Public Dispensers' Association**, St. Bride Institute, Ludgate Circus, London, E.C., at 8 P.M. Mr. C. T. Rutter will give a paper entitled "A Sketch of the History of Chemical Theory."

Thursday, May 28.

**Cheltenham Chemists' Association**, 5 Promenade, at 9 P.M. General meeting. Discussion on the Pharmacy Bill.

**Birkenhead and Wirral Chemists' Association**, Hotel Victoria, New Brighton, at 8.30 P.M. Annual supper. Tickets (3s. 6d. each) can be had from Mr. F. C. Cooling, Hon. Secretary, 29 Christ Church Road, Oxton.

**London Chemists' Association**, the Horns Assembly Rooms, Kennington Park, London, S.E., at 7.30 P.M. Musical and social evening, under the direction of Mr. J. Wellesley Douglas. No tickets required.

Friday, May 29.

**Drug-trade Appeal Fund**, St. Bride Institute, Ludgate Circus, London, E.C., at 3.30 P.M. Annual meeting.

**Blackpool and Fylde Chemists' Association**, Palatine Hotel, Blackpool, at 9 P.M. Special meeting to consider the proposed Pharmaceutical Defence Union and a letter from the Blackpool Mineral-water Manufacturers' Bottle Protection Association.



# Exchange Column—Bargains.

## TERMS.

*One halfpenny per word with name and address. One penny per word if we register the address and attach a number.*  
**No Advertisement inserted for less than 6d.**

## TO BUYERS AND SELLERS.

We take every care to ensure that proprietary and other goods advertised in this column are genuine surplus stock of reputable persons in business, and are compelled to refuse advertisements sent by those who, when occasion requires, decline to satisfy reasonable inquiries as to their *bona-fides*.

We again call the attention of those who use this column for the sale or purchase of goods to the desirability of using our Deposit System. Some forward goods before they receive money for them, and others forward money to advertisers before they have even seen the goods. Disappointment in such circumstances is bound to happen now and then, and it is to prevent this, as well as to check fraud, that our Deposit System was instituted.

The buyer sends us the money for the goods, and when we hear from him that they are satisfactory, and not till then, we hand over the money to the seller. A commission of 6d. is charged by us on any transaction of 3l. or less, and 1s. if above that amount. The commission is payable by the buyer, and should be included in the money sent to us. All Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank, Ltd."

## FOR DISPOSAL. APPARATUS.

TWO burettes, 50 cc., and stand; double-funnel stand; 14-in. retort stand; 5s. WIGGIN, Chemist, Ipswich.

STUDENT'S balance, by Becker, in mahogany case, with levelling screws, rider attachment and weights from one milligramme to fifty grammes; £2 15s. SHEPHERD, 79 Grosvenor Road, Canonbury, London, N.

## BOOKS AND PERIODICALS.

"YEAR-BOOK Pharmacy," 1870-1897; "Pharmaceutical Journal," 1841-1848; nicely bound. Offers, 20/17, Office of this Paper.

FOR Sale, "Pharmaceutical Journal," 1864-90, handsomely bound, also 1890-95, unbound; CHEMIST AND DRUGGIST, 1872-90, bound, 1891-97 unbound; condition equal to new; what offers? "L., 49 Shepherd's Bush Road, London, W.

## FORMULÆ.

FORMULÆ for massage-cream, hazel foam, foot-powder, Al embrocation; 1s. each, three 2s. 6d. "W." (25/15), Office of this Paper.

NOVEL seasonable speciality.—New polish and varnish reviver; no plant required; formula, P.O. 1s. "EXPERT" (25/05), Office of this Paper.

IMMEDIATE production of finest lavender water; cost 2½d. per oz., from English oil; exquisite aroma; formula 1s., sample 2d. free; invaluable to small retailers. HUGHES, 53 Penn Road Villas, Holloway.

AN invaluable embrocation formula for rheumatism, lumbago, neuralgia, etc.; very easily made, and ready for use; it dries in the skin without rubbing, and in no way stains clothes; this formula with a capital would make a large fortune. 21/3, Office of this Paper.

## OPTICAL AND PHOTOGRAPHIC.

BY 4 cartridge Kodak, solid leather case, glass-plate adapter and double holder, £3 10s. (Ross's); 10 by 8 wide-angle symmetrical lens, as new, £2 5s.; 5 by 4 I. I. & H.'s Iris diaph. (detective lens), 20s. RIRSON, Chemist, Carlisle.

## SHOP FITTINGS.

HOP spring roller-blind, 15 ft. by 9 ft., Dean's; what offers? LOBB, Willenden.

DUNTER, 12 ft., glass fronted; dispensing-screen, 6 ft., mirror-glass shelves; Swan carboys; desk, case, etc. 75 Walkley Crescent, Sbeffield.

## SHARES.

SHARES for sale. See p. 128.

OFFERS wanted for 3 £50 Camwal debentures, 20 ordinary, and 5 preference. 26/14, Office of this Paper.

## PROPRIETARY ARTICLES.

11 DOZEN Ozonia, what offers, carriage forward? 30 1s. Hankey's veterinary ointment, 15s. carriage forward cash. 26/30, Office of this Paper.

## MISCELLANEOUS.

TWO 25-gal. dental gas cylinders, double union and foot key; 12s. 6d. MEREDITH, Hadlow, Tonbridge.

MASSEY'S diatorics, teeth backs and fronts; 3s. 100. EDWARD'S, 176 Upper Richmond Road, Putney.

ONE doz. douch cans, 3 pints, complete, 15s.; one doz. enemas, good quality, 15s. HENRI, 34 Oakfield Road, London N.

LABORATORY bench, also suitable for warehouse or back shop, 8 ft. long, drawers and cupboards below, shelving above; £2 10s. WIGGIN, Chemist, Ipswich.

BALANCE, by Becker, new condition, 8½ in. beam, mahogany and glass; ½-plate camera, Lancaster's instautograph RR lens, 2 dark slides, case, stand. Cash offers, DALGLEISH, Huntingdon.

TEETH for sale; about 1,000 odd diatorics, good shades and type, 25s. per 1,000, or nearest offer; also sundry dental tools; sent only on approval against remittance. HOLM, Dentist, 2 Sydenham Road, London, S.E.

S. S. W. oil-pump chair, Wilkinson pattern, £13; Morrison ditto, £6 15s.; S.S.W. engine, with cone journal, handpiece, and 3 doz. burs, 35s.; engine fitted with No. 7 handpiece, 45s.; gunmetal vulcaniser, 2-flask size, with self-regulating gauge, 52s. 6d.; gas-stands for 2 cys., 7s. 6d.; tooth forceps, 1s. 6d. per pair. Write for list of bargains, A. G. TAYLOR & Co., 24 Great Pulteney Street, London, W.

## WANTED.

7-FOOT bent-glass counter case. TOOTILL, Chemist, Altrincham.

EPPS' Cura Cene; can anyone offer 4s. 6d. size? 19/38, Office of this Paper.

COLLAPSIBLE tube filling machine. Full particulars, WHARRAMS, LTD., Vicar Lane, Leeds.

ROOFE'S Dr. Scott's cure for deafness. P. J. HOWE, 73 Markhouse Road, Walthamstow, Essex.

WRIGHT'S soap, Colgate and Williams's shaving-sticks, and surplus patents. 26/9, Office of this Paper.

SHOP-ROUNDS, drawers, scales, etc. State full particulars and lowest price, 25/34, Office of this Paper.

CHECK-TILL (O'Brien or Gledhill) wanted immediately. State price, MARSHALL, Chemist, Moseley, Birmingham.

PLATINUM, iridium, platinum-chloride reduced; prompt remittance. ROWSELL, 11 Crebore Street, Dulwich.

"CHEMIST AND DRUGGIST," complete, January 1 to May 20, 1908. Lowest cash, 22/36, Office of this Paper.

ONE 10-gal. show carboy, pear shape; cut stopper. STRICKLAND & Co., 25 Cromwell Place, South Kensington, S.W.

DENTAL forceps, utensils, etc., for branch; cash, or exchange valuable books. JONES, Dentist, Market Street, Holyhead.

SILENT salesman centre showcase; good condition; 6 ft. high, 2 ft. wide. State lowest price, 23/16, Office of this Paper.

MINOR, Major, Chemists' books.—Send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo, Liverpool.

DENTAL chair and engine in good condition; state lowest price; examination before purchase. PICKUP, 4 Chapel Street, Salford.

## ADDRESSES WANTED.

THE present address of Mr. W. H. Marsh, Locum, formerly of Tollington Park, N. 24/19, Office of this Paper.

THE address of Mr. G. Brown, Chemist, late of Abbey Street, Derby, and formerly of 106 Victoria Road, Fenton. 25/19, Office of this Paper.

# EDWARDS'

# "HARLENE"

## HAIR DRILL.

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We will send to any Chemist purchasing a £2 parcel of "Harlene" one gross of

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"UZON" (Brilliantine).	{	" 1 " " " ...	1/-	...	"	11/-	"	}	"UZON" (Brilliantine).
		" 2 " " " ...	2/6			27/3			
"CREMEX" Shampoo Powders.	{	Per Box of 4 Powders	1/-	...	"	11/-	"	}	"CREMEX" Shampoo Powders.

#### SPECIAL.

Full Discount of 20 per cent. off Trade Prices to all buyers of £2 (net), cash with order.

**Carriage Paid.**

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